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THERAPEUTICS OF VIBRATION

The Gift of Friends
19 17

From the Library of
Hug
Prof

Therapeutics of Vibration

The Healing of the Sick
An Exact Science

BY

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PREFACE

The Electrical Age through which we have been passing has been pre-eminently productive of good, and has in every sense promoted the general advancement and welfare of the human race.

We are now just entering the transition period from the Electrical Age to the Age of Vibration. The genius of this age will be controlled and directed vibration.

Vibration is the primal law of the Universe, nothing being exempt from it.

The Age of Electricity will reach over into and will blend with the Age of Vibration, because Electricity will probably be one of the chief means of producing controllable vibration, but vibration will be *per se* the dominant force of the age.

The wonders produced by Electricity have been nothing short of marvelous. Vibration will so far surpass it in every field as to make it seem ordinary in comparison.

In this volume we have but indicated its

revelation in one direction. When this line has been worked out to its ultimate and logical conclusion, the prevention of disease will have become an accomplished fact, pain and suffering will have been reduced to the minimum, and healthful life prolonged towards its full span, irrevocably fixed at one's birth.

Recognition of the law of Vibration, as herein set forth, creates of the art of healing an exact science.

WM. LAWRENCE WOODRUFF, M. D.
Long Beach, California.

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The Gift of Friends
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DEMONSTRATION OF HUMAN VOLTAGE

The cut on opposite page shows the experiment in which was demonstrated the existence of electricity in the human body, identical with and having the properties of electrical currents from other sources. It flowed over wires, operated electrical instruments, and recorded voltage to the amount of 8 mille volts. See page 57.

Drs. Albert J. Atkins and Emily A. Lewis, of San Francisco, Cal., were the experimenters, assisted by a corps of expert electrical engineers.

Therapeutics of Vibration

PROLOGUE

Nature has but few general laws and they are universal in their application. The further she reveals herself to us the more we realize this truth.

Whenever one of nature's laws is really discovered we are immediately impressed by its perfection and simplicity; and, indeed, this may be the unerring test by which to recognize it.

These thoughts never found a better field for their application than is presented in the facts, deductions and conclusions set forth in the following pages:

The trend of this age is to remove cobwebs, to simplify, to harmonize. In the religious world the best thought is in the line of endeavor to get at the simplicity and beauty of the teachings of Christ and their every day application to the simple life of man. In the scientific world the hard places are being made easy, abstruse theory is

fading away, and in its place we are having revealed to us nature's plain and simple laws. In the medical world, which hitherto has been far from simple or scientific, the mysteries and the musty theories that are cumbersome and unwieldy because of their human origin, are beginning to crumble and melt away before revealed science, which is simplicity itself and easily understood.

Scientists of renown, like Sir Oliver Lodge, Principal of Birmingham (England) University, Prof. J. J. Thomson, of Cambridge, England, Prof. Larmor, Mr. and Mrs. Curie, Prof. Crookes and many others working in the same field, have delved deeply into the secrets of nature and have determined the constitution of matter and some of the laws which govern it; and it is my aim, in a simple and logical way, to carry their determination and deductions regarding matter into organic life, to show their simplicity and the universality of their application; and, what is most important to man, their practical side, as we find it in their simple explanation of organic life; and in doing this the tendency will be towards the simplification of our whole understand-

ing of life. This application of facts that were startling when first announced will enable us to comprehend life's processes as well as the diseased conditions that assail it in both the animal and vegetable world, and indicates the way to an easy, scientifically accurate, and positive control of the same.

The eminent French mathematician, Poincarre, once remarked that it is folly to ask whether a theory is true or false, the only proper question being—"is it productive?"

We shall endeavor to prove in this connection that the electronic theory of matter and the theory of atomic cell vibration are not only productive but absolutely and of necessity true, because they fully explain the life processes and how to regulate them. In fact, it, for the first time, tells us what, on the material side, life is; and unquestionably proves that material life is atomic cell vibration, and nothing else; that the spiritual element we call life reaches down to the earth elements or atomic groups of the different elements of matter, draws them to itself, and makes of them organic life in the form of the organized cell.

CHAPTER I.

THE ATOM AND THE ELECTRON—THE LAW OF VIBRATION—SPECTRAL ANALYSIS OF THE ATOM—SOUND, HEAT AND LIGHT VIBRATION — APPROXIMATE REGION OF CELL VIBRATION.

The atomic theory was first promulgated about 450 years B. C. About the year A. D. 1750 the Italian scientist, Boscovich, presented this theory to the world in so clear a manner that it has become the accepted idea. In contemporary times Dalton has brought it to its present perfection, as follows: "That matter is composed of indivisible particles or atoms which have definite weight." Recently Prof. J. J. Thomson, of the Cavendish Laboratories, of Cambridge, England, has supplemented this with the theory of the electrons, for which work he was awarded the 1906 Nobel prize of $40,000.

Prof. Thomson has shown in his electronic theory of matter—which is at present accepted by nearly all the leading scientists —"that the electron is the ultimate unit of all matter. The atoms are made up of

electrons or disembodied electrical charges in rapid motion; the atom of one elementary substance differing from the atom of another elementary substance only in the number and arrangement of electrons contained in it. Thus we have, at last, the ultimate unit of which all forms of matter are composed; and the remarkable feature is, that this ultimate unit of which all matter is composed is not matter at all, as we ordinarily understand the term, but electricity. Matter then is a pure hypothesis, and energy is the only reality. The electron being a disembodied charge, contains no matter, and is the electrical unit."

"Thomson supposes the atom to be made up of a sphere of uniform positive electrification, through which the electrons or negative charges are distributed. These electrons are at enormous distances apart compared with the spaces actually occupied by them, like the planets in the solar system; and move with very high velocity. The electrons are so distributed through the positive sphere as to be in dynamical equilibrium under the forces that are acting upon them. These are the attraction of the positive elec-

tricity for the negative electron, and the repulsion of one negative electron by another."

The results of spectral analysis show that the chemical elements have their own definite and characteristic spectrum. The violent motion of the electrons in the atom causes atomic vibration.

Vibration is the primal law of nature, and is universal in its application. There is nothing exempt from this law.

Spectral analysis has proven the vibration of the atoms of all matter, and that each element or atomic group has its own special, peculiar and characteristic vibration, and its own definite and well defined place on the scale of vibration. The relative number of vibrations for each natural element has not yet been determined, but that this will be ascertained ere long I am convinced. The relative position on the general scale of vibration for the natural elements entering into organic life is much easier to determine, and after careful study I am convinced it should be located in the region of the commencing of light vibration. Prof. Jones, of Johns Hopkins, says that "spectral analysis shows that the chemical ele-

ments have their own definite and characteristic spectrum. That an element sets up vibrations in the ether that are of perfectly definite wave lengths, and by means of which the elements in question can be identified—these being different for every element."

If more proof is needed to prove the above premises, then we have the vibration of sound, causing its waves in the ether, which enables the ear to recognize it. Sound vibration commences at the bottom of the scale and ranges from 40 to 40,000 vibrations per second. Then we have heat, the vibrations of which carry us on up the scale to the vibrations of the different light waves, and these range from 10 to 75 trillions of vibrations per second. This gives us a very extensive scale of vibration, and somewhere on this scale the range of vibration of the organic cell will be established. By consulting the periodic table prepared by Mendeléeff it will be seen that the elements entering into organic life occupy its first third, and, if gauged by their atomic weight, they occupy the first *fifth of* the columns; and so, of necessity,

the vibrations of cell life belong to the lower end of the scale of vibration occupied by the natural elements. Radium is the element of highest atomic weight, and with its position near the head of the column is of necessity the element having the highest atomic vibration. The radium emanations, according to Prof. Jones, are comparable with the movement of light in respect to velocity, which would of necessity put the vibration of the radium atom in the neighborhood of the upper end of the scale of light vibration. This would seem to fix the place of atomic cell vibration in the neighborhood of the lower end of the light spectrum or scale of vibration.

That the place on the scale occupied by atomic cell vibration is in the neighborhood of commencing light vibration, I am sure is capable of reasonable demonstration. Sir George Stokes, in explaining the nature of the X-ray and accounting for the facts known of it, brought out the following: "The X-ray is a series of irregular pulses (vibrations) in the ether, caused by the bombardment of the Cathode rays or particles (negative electrons) falling on the

glass walls of the confining vessel and thus causing the pulses in the ether known as X-rays."

"To say that an object is transparent to any given form of radiation, means that it is not thrown into vibration by the radiation when the radiation falls upon it. On the other hand, to say that an object is opaque, means that it is thrown into vibration by the radiation. Glass is transparent to light because it is not thrown into vibration by the light. A thin sheet of metal is opaque to light because the light wave falling upon it produces vibration within the metal."

This is another proof of the universality of the law of vibration. Why is glass transparent to light? Because light vibrations are too high to even approach the atomic vibration of glass. For confirmation of this, consult the Periodic table. The elements entering into the formation of glass are Silicon, combined with two oxides, either of Potassium or Sodium, and Calcium or Lead; note their position in the table, combine them as you may, and their atomic vibration is very low, considerably

below that of the combinations forming cell life, and away below that of light vibration. Organic matter is opaque to light because they are in the same neighborhood on the scale, near enough for light vibration to pick up cell vibration and carry it on higher up the scale, nearer to the position of light vibration. This refers only to the lower half of the scale of light vibration, the upper half of the scale of light vibration, above the blue, overstimulates cell vibration to the point of destroying it; it stops cell vibration because of complete exhaustion or paralysis, which leads to the death of the part if it be exposed for a sufficiently long time. The well-known action of the X-rays and of Radium emanations is an illustration of this point, their vibrations belonging to the upper end of the vibrating scale.

The sheet metals, as their position in the tables will show, have an atomic vibration very high, away above that of cell vibration, and in the neighborhood of the upper end of the scale, so that the vibrations of the X-rays and Radium emanations are near enough so that they are able to pick up the atomic vibration of the metals and carry

them on up towards their own position on the scale, thus causing the opacity of the metals. All this would seem to bear out my assertion that the position on the vibrating scale for cell life is in the neighborhood of commencing light vibration.

CHAPTER II.

WEIGHT OF THE ATOM—NUMBER OF ELECTRONS IN THE ATOM—MAGNETISM, HOW IT IS CREATED—MENDELEEFF'S PERIODIC TABLE NO. I.—PECULIAR PROPERTIES OF RADIUM AS OBSERVED BY THE CURIES—THE RELATIVE BALANCE BETWEEN THE NEGATIVE AND THE POSITIVE ELECTRIFICATION OF THE DIFFERENT ELEMENTS—URANIUM—THORIUM.

"The atomic masses of the chemical elements differ as widely as 1.01 for Hydrogen and 258 for Radium, and all intermediate orders of magnitude are met with. These masses are due to the electrical charges or number of electrons of which the atoms of all the elements are composed. The heavier atoms contain a larger number of electrons than the lighter ones—the approximate number in any atom being expressed by the atomic weight of that atom in terms of Hydrogen as unity, multiplied by 770, this being the number of electrons in a Hydrogen atom."

Prof. Thomson does not speak of the positive electrical charge as positive elec-

trons, but we can see no reason why they should not be so referred to, and to simplify matters we will so speak of them in this work. Neither does he speak of the movement of the electrons as vibratory, but uses the words "in violent motion," and we can find no reason why he should not have said *or vibration.*

It may not be proper to say electronic atomic vibration because of this, but in view of the facts brought out by spectral analysis of the atoms of the different elements before quoted, in which it is inferentially, if not in so many words, claimed that the vibrations of the atoms of the different elements set up vibrations in the ether that are of different wave lengths, each element having its definite vibration and wave length by which it is recognized, is in itself proof positive that vibration is the primal law of nature.

One other fact that Prof. Thomson has set forth is that the violent motion of the electron within the atom creates magnetism, consequently, having proven that the atoms of the different elements are composed of different numbers of electrons and that each element has its own peculiar vibration and

ether wave, each and every element must of necessity have a magnetism peculiar to itself, caused by its own individual vibration. This fact must be kept clearly in mind at all times, for it is the great factor in the government of organic life, and is, in fact, the law of attraction, selection and repulsion that makes cell life possible.

We will now take up the theory of the octave, later known as the Periodic theory, as set forth by that great Russian scientist Ivanovitch Mendeléeff, and show how it and the electronic theory harmonize, and together how they explain known drug action. He divided the natural elements into groups or octaves of nine, in parallel columns, and as is so often the case, he builded much better than he knew.

The position of the different elements in the column is determined by their atomic weight, commencing with the lightest and gradually ascending the column as the atomic weight increases.

The Group 0 in each column is known as having no valancy, that is, they have no known chemical combination with any other

element. It will be noted that the elements in Groups 1 and 2 at the foot of each column are alkaline elements; that as we ascend the alkalinity decreases; that the elements in Groups 3, 4 and 5 are either weakly alkaline or weakly acid, or indifferently one or the other; that the elements in Groups 6 and 7 are strongly acid, and that those in Group 8 are positively acid. By drawing parallel lines through all of the columns attention is directed to the similarity of the elements on the parallel lines, they having similar properties and are closely related; this similarity usually is noted in each octave but may be separated by two or more octaves.

While Mendeléeff rejected the electronic theory *in toto,* it is proving the keystone to his otherwise perfect arch. Prof. Thomson pointed this out in part, but it remains for us to do it in its entirety.

The electron makes up the atoms of all matter, their only difference being in the number of electrons, both *positive* and *negative,* their atoms contain. THAT THE POSITIVE ELECTRIFICATION IS UNIFORM IN THE ATOMS OF MATTER FORMING A GIVEN ELE-

MENT IS UNDOUBTEDLY TRUE, AND THAT THERE IS NO UNIFORMITY IN THE POSITIVE ELECTRIFICATION OF THE DIFFERENT ELEMENTS, ONE WITH THE OTHER, IS, I AM SURE, CAPABLE OF DEMONSTRATION. This fact is brought out more fully by a study of the therapeutic side of the elements than in any other way. The only other fact to substantiate this is in the action of the radio-active elements, as observed by the Curies and described as follows: "They have determined that Radium continues to throw off negative electrons or charges, until it, itself, becomes so highly charged positively as to prevent the further throwing off of negative electrons, or until a balance is reached and the positive electrification gains control, and for this reason it ceases to be radio-active." The position we find Radium occupying in the Periodic table in Group 6, as will be shown later, would indicate this lack of positive control and relative excess of its negative electrons. This explains the well-known properties of Radium. Uranium in Group 5 is somewhat less radio-active, and Thorium in Group 4 is the least radio-active of any of the recognized radio-active

elements, and the explanation is, that, speaking in general terms, the elements comprising each group have a uniform positive electrification, and a similarly relative balance between the positive and negative electrons.

How this serves to illustrate and prove the truth of numerous points herein set forth for the first time, will be presently elucidated.

CHAPTER III.

THE RELATION OF ATOMIC VIBRATION TO THE EXPLAINING OF DRUG ACTION—INFLUENCES REGULATING ATOMIC VIBRATION—NEGATIVE ELECTRONS—A STUDY OF THE PERIODIC TABLE.

In studying electronic atomic vibration and its application to the explanation of the known therapeutic action of the natural elements, I found the Periodic tables of inestimable value. THE SIMPLE INCREASE IN THE NUMBER OF ELECTRONS IN THE ATOMS OF THE DIFFERENT ELEMENTS DID NOT FULLY EXPLAIN THEIR INFLUENCE ON CELL LIFE. I DETERMINED THAT THERE MUST BE INFLUENCES REGULATING ATOMIC VIBRATION OTHER THAN THE DIFFERENCES IN THE NUMBER OF ELECTRONS THAT THE ATOMS OF THESE DIFFERENT ELEMENTS MAY CONTAIN.

In studying the influence of the negative electrons on the human body I have determined, as you will see in Chapter IX, that it is nature's greatest stimulant to atomic cell vibration, and, consequently to all of life's processes. If this be so after the atoms enter into the organized cell, it must

of necessity be true before the combination takes place to form the cell.

I determined by deduction that it was the *relative numerical predominance of the negative electrons that was this factor in influencing all atomic vibration.* Then by studying the position of the elements on the Periodic table and keeping in mind all the while their known and well established therapeutic properties I was confirmed in this belief. Thus I am able to state *positively* that the *two factors* governing atomic vibration are, first, the increasing number of electrons the atoms of the different elements contain, one above the other, and second, the *relative predominance of the negative electrons over the positive electrification.* This is shown by the position of the elements in the different groups of the Periodic tables, starting with Group 1, where we find a perfect balance between the positive and negative electrons of all the elements making up this group. In a therapeutic sense the elements of this group are stable and reliable, and their activity and influence over all metabolism gradually increases with the increase in the number of electrons

their atoms contain. The element in Series 3, for instance, has a larger number of electrons in its atoms and a higher atomic vibration than has the element in Series 2, and this means in every instance that it is more active in a therapeutic sense; and thus from series to series in the number of electrons contained in the atom in atomic vibration and in therapeutic activities is there a proportionate numerical increase. This keeps up to the end of the series where we find gold. This is, as we all know, one of the most active elements of the materia medica. The stability of the elements in this group is a result of the perfect balance between positive and negative electrons.

Now notice the elements in the different groups and compare their known and well established therapeutic properties, and note how it illustrates this second factor that influences atomic vibration. Remember that as the ascent is made from group to group, that this balance between the positive and negative electrons is gradually lost; that in Group 2 the atoms of the different elements have slightly less of the positive electrification and a slight increase in the number of

negative electrons in each of their atoms, and that in Group 3 this balance is still further disturbed, and so on up the columns, from group to group, there is a gradual falling off of positive electrification, and consequently of positive control, and a proportionate gradual predominance of negative electrons and of all the activity they stand for, until in Groups 6, 7 and 8, the negative electrons greatly predominate, and as we will later show, in Chapter IX, as in Oxygen, they may, for the time being, under certain circumstances, govern the actions of its atoms, and as we will later show in the same chapter, as in the case of Sulphur, that the negative electrons hold such sway in governing the actions of its atoms as to entirely dominate its action. Radium serving to fully illustrate these points.

Iodine, in Series 7 and Group 7, is a perfect illustration of this, as is also Chlorine in Series 3 of the same group. They being near the top of the column, have, relatively speaking, but a small positive electrification and a very great predominance of negative electrons. Their action in chemistry and in medicine has a very wide range, with num-

erous combinations, and whenever they combine they increase the activity and solubility of the element combined with, thus decreasing its stability and increasing its atomic vibration and stimulating properties. This is so, both in a chemical and in a therapeutic sense. Thus combined, they are much more active, they have a much wider range of application and to a much greater degree influence cell metabolism than do the crude elements they combine with. Notwithstanding the fact that in most instances these two elements combine with elements having a much greater number of electrons in their atoms, and consequently a much higher atomic vibration if it should depend wholly on the number of electrons their atoms contain, it would naturally be expected that this combination would give a slower atomic vibration. But this is not so. The greater activity of the combined elements over the elements combined with, is only explained because of the greater predominance of the negative electrons in the two elements mentioned, keeping in mind the great activity of negative electrons. Iodine combining with Mercury and Chlo-

rine with Gold, serve to illustrate this point. Sulphur is also a perfect illustration of this, and conclusively proves my position, as is shown in Chapter IX. The stone rejected by the builder now becomes the keystone to the otherwise perfect periodic arch, for in no other way, therapeutically speaking, can it explain the known action of the elements or atomic groups on the human system. The relative changes in the atoms of the different elements, between the positive and negative electrons, has been heretofore surmised, but never before, to my knowledge, has it been definitely stated; and indeed, it was only by taking cognizance of known, well established drug action and the observations made by the Curies about Radium, that it could be determined. This is the first definite statement of this law. *

* In a recent article Sir Oliver Lodge gives full recognition to this relative unbalance between positive and negative electrons as follows: "That whereas the atom was uniform, electrons are distinguished by their positive or negative qualities, a negatively electrified body being one which contains a surplus of negative electrons, an unelectrified one which contains negative and positive in equilibrium; a positive contains a deficiency of negative electrons."

CHAPTER IV.

ELECTRICITY THE ONE AND ONLY ELEMENT IN THE UNIVERSE—THE MAGNETIC LAW—ORGANIC LIFE, WHAT IT IS—HOW THE CELL IS FORMED AND OF WHAT COMPOSED—HOW THEY DIFFER ONE FROM THE OTHER—ACTION OF FOREIGN BODIES ON CELL LIFE.

Revealed science, as presented in the preceding pages and as ascertained from other sources of eminence and reliability, enables us to state our present understanding as follows:

Previous to these discoveries it was understood that the universe was composed of sixty-four or more natural elements and that the smallest divisible part of matter was the atom.

Science has recently made further revelation, and we now know that there is but one element in the whole universe and that element is Electricity. The able men who have given their life to the study of these intricate problems are, furthermore, agreed among themselves that matter maintains at all times active motion within itself, since

the atom is composed of a large number of electrons, the majority of which are negative and in a constant state of violent motion or vibration, controlled and held within the atom by a smaller number of positive electrons.

We also know, by the same unimpeachable authority, that the sixty-four or more natural elements of the old text books, such as Iron, Copper, Zinc, Potash, Hydrogen, Oxygen, Nitrogen, or any others by whatsoever name called, are one and all Electricity and nothing else; and that the only difference between one and another lies in the number of electrons their atoms may contain. Each of the old elements has a definite number of electrons in each of its atoms, and this gives it its individuality. The violent activity of the electrons within the atom generate magnetism, so that the group of atoms called Iron, for instance, containing each and every one a definite number of electrons, must create a magnetism peculiar to that group alone; and Copper, whose atoms contain a larger number of electrons than Iron, has its own special quality of magnetism. The law is

universal in its application; so that each of the atomic groups, or elements, has its own special magnetism peculiar to that group; and these different atomic groups when combining, as Hydrogen and Oxygen to form water, or Phosphorous and Iron to form Iron Phosphate, by their combined vibration make their own special magnetic field.

These revelations of science, as I will endeavor to show, open to us the mystery of organic life, hitherto but little understood.

It now becomes proper to speak of organic life as the union of the spiritual element called life with the atomic groups or elements that are organized into a cell, which is the unit of all life. This union is a mystery that has hitherto been only vaguely guessed at, but in reality the union of the spiritual with the material results in a cell that is self-propagating and is the unit of all that we know as organic life.

The mass of cells make up the individual. It has been determined by careful analysis that, so far as concerns the material side of the case, the tissues and fluids of the

human body are composed of the so-called organic substances known as sugar, fat and albumen. The sugar and fat are formed of carbon, hydrogen and oxygen, and albumen is made up of carbon, hydrogen, oxygen, nitrogen and sulphur, together with water, which is hydrogen and oxygen in combination; and of sodium, chlorine, calcium, fluorine, silica, iron, magnesium and potassium. The latter are combined with phosphoric or carbonic acid. Sodium salts predominate in the blood plasma, potassium salts in the blood corpuscles. Each of these substances will be recognized as among the original or natural elements or groups of atoms.

Instead of leaving us to take these groups of atoms or elements into our system in their crude form, nature has worked them up into fruits, vegetables and juicy meats very tempting to the palate. All these nice things we eat are simply vehicles prepared by nature to carry into our systems the above elements or groups of atoms. How kind of nature to give us so much pleasure! It surely helps in great measure to make life worth the living!

The cells of different tissues or organs have different combinations of the atomic groups. For instance, the bone cells contain Lime, Magnesium, Phosphorus and Fluorine, and all nerve cells are composed of Magnesium, Potassium, Phosphorus, Sodium and Iron. Muscle cells contain the same elements as the nerve cells, with the addition of Chlorine and Lime. Remember that all these atomic groups, in combination as we find them in the tissues, are at all times in active vibration, the electrons in the atom and the atoms in the cell; so that we have a definite magnetic field for each group of cells known as organs or tissues. This is an important point to bear in mind.

From these preliminary statements it will become apparent that everything entering into organic life on the material side is from one or more of these atomic groups or elements, and consequently is under this law of vibration; and if appropriated by organic cell life it must be attracted, appropriated and assimilated in accordance with the same law. To this there is no exception, and the law applies impartially to gas, to food in

solid or liquid form, and to medicine. It applies equally to the normal cell elements and to other combinations of elements that are harmful or destructive separately or in mass. With normal electronic atomic cell vibration the hungry cell attracts only its normal food elements or groups of atoms. Absolutely normal vibration is rare. Consequently with abnormal vibration and with a more or less changed magnetic field, it is possible that other elements or atomic groups may be and are attracted to the cell or group of cells and tissues; and in some cases a destruction of the cells may be among the consequences. Every substance or element entering into the organism whose vibration and magnetic field is dissimilar to that of the organism, fails to be attracted and is there as a foreign body and may be thrown off. No harm results from its presence except that it may mechanically act as an irritant; or it may over-stimulate or greatly depress cell vibration to the great harm of the latter, or even to its destruction.

CHAPTER V.

DIGESTION AND ASSIMILATION—CIRCULATION —CAPILLARIES—THE CELL THE LIFE UNIT —ITS FUNCTION, AND HOW PERFORMED.

To better understand this whole subject, let us for a moment trace in this human machine the processes which take up these toothsome morsels, break them up and return them once more to their natural elements or atomic groups, and again organize them into living tissues.

The food by mastication in the mouth is shredded so that the gastric juices can act upon it to further break it up. From the stomach it is passed into the upper half of the small intestines where it is further dissolved and made into a semi-liquid mass. By the constant motion of the intestines their contents are gradually worked along until they come in contact with the absorbents, whose action somewhat resembles that of a sponge; and the emulsified parts of the mass are passed on into the lymphatic system, which further works them over until they are ready to be emptied into the general circulating medium, the blood,

which reaches every tissue and cell of the body. The blood from the lungs, rich in oxygen, joins this nutrient blood at the heart. The blood, when it leaves the heart by way of the left ventricle and goes out into the arterial system, is supposed to contain, and normally does contain, all the elements required for the proper nourishment of every tissue and cell in the body. This nutrient blood is carried through the arteries which end in a capillary loop. Now, the capillary is the only place where this nourishing fluid is brought into direct contact with the cell, which is the unit of all life, and, indeed, the capillary is simply a mass or cluster of cells in the form of a hollow loop, the cells sprouting, as it were, from all sides. The blood enters this loop of cells, passes through it to the small vein, which in turn empties it into the larger veins which carry it back to the heart, thus completing its circuit.

All capillaries are practically the same and have the same office to perform, namely, to bring the nutrient blood in contact with the individual cell. It is only in the capillaries that the tissues and cells of the body are brought in contact with the blood and nourished.

CHAPTER VI.

ATOMIC CELL VIBRATION—THE LAW OF SELECTION GOVERNING CELL LIFE—NORMAL AND ABNORMAL CELL VIBRATION—THE RELATION OF THE DIFFERENT NATURAL ELEMENTS TO CELL LIFE—MAN A MASS OF INDIVIDUALIZED ELECTRICITY—MAN A STORAGE BATTERY—MAN A COLLECTOR OF ELECTRICITY—SUPPLYING DEFICIENCIES.

The cell is the unit of life as the electron is the unit of matter, or more properly speaking of force. The cell is made up of a group of atoms, each containing numerous electrons, all in active vibration; and consequently electronic atomic vibration is the material life of the cell. This being true of one cell it is true of all.

Electronic atomic cell vibration generates a magnetic field individualized for each group of cells forming the different organs and tissues. This is the law of selection or attraction which enables a cell or group of cells to select from the nutrient blood the elements needed for its sustenance, and explains why certain groups of atoms are

drawn to a cell or group of cells and other groups pass by to be later attracted by other cells; and why the cell debris is thrown off from an uncongenial magnetic field back into the circulation, by which it is carried on to the eliminating organs, where it is attracted, appropriated and formed into excretion and thus eliminated from the body. It also explains why certain medicines influence only certain groups of cells called organs or tissues.

The association of the different groups of electronic atomic elements in the cell or group of cells making up a given organ or tissue, means an attunement or unison of the atomic cell vibration with a magnetic atmosphere that is the peculiar property of the organ or tissue; and because of this specific magnetic atmosphere, the organ or tissue has the power of making selections which, speaking in general terms, are always the same. On the other hand, the different groups of cells called organs or tissues must have, within certain definite limits, the same general attunement of atomic cell vibration; for the whole organ-

ism must be attuned to the same general key.

That there may be some departure from the normal in the cell vibration of a certain organ or tissue is true, but this, if long maintained, will speedily effect the attunement of the whole organism. Since the life of the cell is atomic cell vibration, the same is true of the mass of cells that make up the individual; and this being so, there must be a normal and an abnormal cell vibration. A normal cell vibration means perfect health, and abnormal vibration means disease, suffering and ultimate death of the cell and of the mass of cells; or, in other words, the death of the individual.

Water is one of the principal compound elements of the universe; it is also one of the principal elements that go to make up all cell life, be it vegetable or animal. About nine-tenths of all animal tissue is water. Now what is water? An atom of water is composed of one atom of oxygen and two atoms of hydrogen, and nothing else. In analysing the atoms of hydrogen and oxygen we find they are composed of electrons and nothing else, and the one and only

difference between one and the other is that an atom of oxygen contains 11,550 electrons more than does an atom of hydrogen. From this it is apparent that water resolves itself, in an elementary sense, back to the electron, which is the unit of electricity, and is in fact simply electricity and nothing else. I simply use this as an illustration of the point that all matter is electricity and nothing else, and as an aid in fastening it firmly in the mind.

I use water as an example also because of its forming so large a part of all tissues and because it will help to further illustrate the point that the cell is composed of the natural elements. I have said before that about nine-tenths of any given cell tissue is water and this water is held in suspension in the cell and tissue by sodium chloride (common salt). An atom of salt holds in suspension in the tissues two atoms of water, and salt is chlorine and sodium; and thus I could go on with all the different elements, showing the relation each to the others, but I think these illustrations are sufficient to demonstrate the statements made and to prove the

points we have presented as to the constitution of a cell.

The cell being composed, as we have shown, of the different atomic groups, which are simply masses of electrons always in violent motion or vibration, then the individual life, be it animal or vegetable, is simply a mass of individualized electrical force; always undergoing loss by spending itself in the performance of its functions, always changing its combinations, but always doing so according to fixed laws. Its energy is constantly being radiated into space and to neighboring organisms, and consequently it must be constantly restored to the organism from the different natural elements or atomic groups and neighboring individual organisms.

Thus, every organism is a collector of and a storage battery for this electrical force, and creates its own magnetic field. It would be very interesting to pursue this thought into all its numerous ramifications if time and space would permit, but they will not.

Let us take man as an example for the illustration of this universal law. In

obedience to the law of supply and demand, ample provision is made in every organism for the collection and storage of this electrical force. Owing to a too intense life or too rapid radiation, or because some one or more of nature's laws is not obeyed, this electrical force falls below the normal. The point most often neglected is that of supply, for a certain quantity of the material elements must be supplied and appropriated each day to make up for energy lost or expended. A definite quantity of water must be supplied to the system to take the place of that passed off by the skin and kidneys, and that given off by the lungs. Going off with the water is a considerable quantity of sodium chloride, and this waste must be made up. This is simply an example of what is taking place with regard to all the other elements, and all these deficiencies must be supplied by fresh material in the form of abundance of pure air, water, fruits, vegetables and meats in adequate quantities, *and moreover, the appropriation of these substances requires that the atomic cell vibration be sufficiently near the normal to attract them to the cells that are hungering for them.*

CHAPTER VII.

WHAT DISEASE IS—HOW THE ELECTRONIC THEORY AND THE THEORY OF ATOMIC CELL VIBRATION FULLY EXPLAINS ALL DISEASE PHENOMENA NOT CAUSED BY TOXINES—THE BANKING OF THE NERVE FORCES IN THE REGION OF THE MAIN NERVE CENTRES—THE DISEASE OF OLD AGE.

Granting that food, drink and pure air are supplied to the system in sufficient quantities to meet all demands, there must be, in order to properly digest, appropriate and assimilate these various elements, first a normal electronic atomic cell vibration; next, that the normal amount of electric energy be present; and lastly, but of equal importance, this stored up electrical energy must be evenly distributed to all the various organs and tissues.

What happens if one or more of these three normal conditions is not present?

This is what we call disease, and it manifests itself in one or more of the various forms we are so familiar with. Take the last condition first, because it is probably the first to become abnormal and may be pri-

marily the cause of abnormal cell vibration. We will see what is its course of action: The stored up electrical forces should be distributed evenly to all organs and tissues of the body, and this we seldom find. Usually there is more or less of a banking up of this accumulated force in the region of the solar plexus, brain and spinal cord, which causes not only discomfort and pain but also disturbed function, and the proper digestion and assimilation of food are interfered with. Thus, the cells are deprived of their proper nourishment and abnormal cell vibration follows as a consequence. Presently I will endeavor to show how these evils may be easily avoided or corrected. In all diseased conditions there must be an abnormal cell vibration which may be one of two kinds, an excess or a deficiency of electronic atomic cell vibration. In excessive cell vibration we usually have an excess of electric energy generated. This shows itself in a high strung, tense nervous condition; the brain is too active, the whole system shows tenseness, high fevers may be present with active delirium, the gastric juice is acrid and burns, and usually it is

scanty. These, with many other conditions that will be more fully treated of later, are indicative of this condition.

In a too slow electronic atomic cell vibration there may be an apparent or real lowering below the normal of the stored up electrical energy or vital force, and in this condition every function of the body is sluggish. If fever is present it is of a low, slow grade; and if there is delirium it is of the low, muttering variety; but more often it is stupor. The whole expression of the person is slow, sluggish, flabby, with want of energy and lack of tone; and all the diseases pertaining to this condition partake of this character.

To illustrate how this principle explains diseased conditions we will take the disease of old age, since we all are, or soon will be, deeply interested in its contemplation.

That "man is as old as his arteries," has become a truism in the medical world. And why the arteries? Because one of the first changes noticed in the average person past middle age takes place in these vessels, and these changes are of such importance to one's physical being as to denote his age

much more accurately than the years he has lived. To illustrate: I have in mind a girl whom I see almost daily, who has lived not over fifteen years and yet has the appearance of an old woman in looks, actions and carriage, and whose arteries bear out the above adage. Then, again, on the other hand, a man came into my office the other day the most perfect specimen of robust manhood I ever saw, young looking, athletic, muscles hard, action nimble. Upon examination I found his arteries those of a young man, organs all sound, mind active. No one would guess his age at over thirty-five years. He was a full-blooded Modoc Indian, had served three years in the war of the Rebellion; for the next twenty-five years was a Government scout on the frontier, always worked hard, lived on plain food and in the open air. He gave his age at fifty-nine years, but yet for all practical intents and purposes, younger by thirty years than the girl mentioned above. He was only as old as his arteries.

The changes in the arteries due to approaching age are simply indicative of the changes taking place in the body generally,

but are of far greater importance because of the important offices which the arteries perform. This senile change in the arteries may come on at any age as measured by years of life lived, but usually it takes place after the age of forty-five or fifty years. Somewhere about this time the muscle cells of the arteries undergo degenerative changes, usually designated as either fibrous or calcareous degeneration. This causes the artery to lose its tonicity and contractility and makes it brittle, so that with any undue strain or increase of blood pressure it breaks, causing hemorrhage. These degenerative changes are most apt to take place in the arteries of the brain, and consequently we have apoplexy and paralysis as diseases of old age.

I will not try to enumerate the different diseases incident to this period of life, but will simply designate general conditions. The basic cause is the same in them all, and this is the thing we are most concerned about.

After middle life mankind, as a rule, may be divided into two classes, the unduly lean and the unduly fat, differences in tempera-

ment deciding which it will be, the cause being the same in both cases.

Until very recently we were at sea as to the real basic cause of senile degeneration. We now know that it is due to a slowing down of atomic cell vibration and nothing else.

Let us see for a moment in what form this slowing down of electronic atomic cell vibration promotes senile decay: The electron in the atom, always in violent vibration, generates magnetism, and the electronic atomic vibration in the cell or mass of cells generates its own magnetic field. Bear this point in mind. As we have taken arterial degeneration as an example and as this degeneration takes place in the muscular coats of the arteries, it will be interesting to know which of the natural elements or atomic groups go to make up muscle cells. Magnesium Phosphate, Potassium Phosphate, Soda, Iron, Potassium Chloride, Sodium Chloride and a very small quantity of Calcaria Phosphate are the ones that enter into the formation of the muscle cells. These with the spiritual element called life, *make up* the normal cell. When the elec-

tronic atomic cell vibration is in a state of normal activity the group of atomic elements that make up the muscle cells has a normal magnetic field, and this perpetually attracts these atomic groups to the muscle cells, which through the action of the law of waste and repair, constantly need feeding.

When, as age advances, this electronic atomic cell vibration begins to slow down below the normal the magnetic field changes, and consequently it ceases to attract some of the members of the atomic groups it formerly attracted. The ones it fails to attract are those having a higher atomic vibration of their atoms, such as Iron Phosphate and Kali Mur, and the ones attracted are the members of the group having slower atomic vibration, consequently, as the atomic cell vibration of the individual falls below the normal certain changes take place in the atomic groups making up the muscle cells, less Iron Phos. and Kali Clor. are attracted; Calc. Phos. may take their place, and we have calcarious degeneration as a consequence. Or the cell vibration may be slower and we get

fibronous degeneration of the tissues, or it may go slower yet and produce fatty degeneration. Carbon and Hydrogen holding down the Oxygen vibrations, consequently the atomic group that forms fat cells have an extremely slow atomic vibration and are only attracted by an unusually slow atomic cell vibration, when they displace, in some measure, Iron, Calcium, Magnesium, Potassium and Phosphorus in the muscle cell formation, and we have fatty degeneration; or atomic cell vibration may go yet still lower until it fails to attract Sodium Chloride molecules, whose property it is to hold water in suspension in the cells and tissues. In this instance, the person literally dries up because the normal number of Sodium Chloride atoms are absent from the cells.

All these changes take place because of a slowing down below the normal of atomic cell vibration and a changed magnetic field in the cell, causing the cell to attract elements of lower vibration than those it normally attracts. This is the scientific explanation of all senile degenerations. Because of a too slow electronic atomic cell vibration, all the cells of the body become

soft and flabby or else lose their proportion of water and shrink up, which shows a loss of balance between the liquids and solids. Water is either thrown off from the body entirely or is retained as water in the tissues, and we call it dropsy. In this condition all the secretions of the organs become scanty and no function is performed properly. I think this will illustrate fully how atomic cell vibration exploits diseased conditions.

CHAPTER VIII.

HOW TO DEMONSTRATE ATOMIC CELL VIBRATION AND HUMAN VOLTAGE—HOW TO REGULATE HEALTH—HOW TO USE STATIC ELECTRICITY TO PERFECTLY CONTROL THE LIFE PROCESSES—HOW TO DETERMINE IF THERE IS A BANKING UP OF ELECTRICAL FORCE—HOW TO LOWER ATOMIC CELL VIBRATION—HOW TO RAISE ATOMIC CELL VIBRATION.

The next thing for the scientist to do to enable us to make an absolutely scientifically certain determination as to whether the electronic atomic cell vibration is in excess or is deficient, is to give us an ato-vibrometer that will record the actual atomic cell vibration of the individual, and a volt meter which will record human voltage. With these instruments of precision we can easily establish a given normal for every type and age of males and females. This will eliminate all guess work in the recognition of diseased conditions and their cause and cure. With accurate tables of normal vibration and voltage it will be an easy matter to ascertain any deviation therefrom, and what

a pleasure it will then be to practice the healing art! To the trained mind, fortunately, as is being proven daily, it is not necessary to wait for these instruments of precision, for it is now possible to readily recognize these abnormal conditions, and with the current given off by the Static Electrical Machine, we can in every case regulate electronic atomic cell vibration and human voltage, and by repeated treatments can restore them to an estimated normal; which means restoration within the cell of a normal magnetic field, and the attraction of the normal elements or atomic groups that go to make up the life of the given cell.

Why do I say an "estimated normal atomic cell vibration?" Because for the present, without the instruments of precision just mentioned, this is all one can do, and we are daily demonstrating in numerous cases that, for all practical purposes, it is sufficient.

With every discovery of a law of nature has come the recognition that it tallies with knowledge obtained through practical experience, and the law of electronic atomic

cell vibration is no exception to this universal rule. The well established, proven action of drugs of every name and description and of whatever school, is fully explained by this law. Whether their action be chemical, physiological or dynamic, we are in every instance conclusively told why this is so; and we have certain knowledge that of necessity they logically, one and all, come under the law of electronic atomic vibration and are attracted to the diseased cell, or group of cells, because of similar magnetic fields.

By studying this law of vibration we learn how a medicine acts and when it is indicated; all guess work is done away with and the prescribing of drugs is brought into the ranks of absolute science. This is a valuable addition to human knowledge, but its value is small in comparison with its more direct application to the cure of disease through the medium of the Static Electrical Machine. By the aid of Static Electricity electronic atomic cell vibration is absolutely under our control, and the results obtained in my daily practice prove that it can be governed and regulated as perfectly

as the engineer controls his locomotive. If the proper fuel, food elements or atomic groups are put into the human machine in the shape of pure air, water, fruits, vegetables and meats in sufficient quantities, then by attuning the vibrations of the current given off by the Static Machine to the electronic atomic cell vibrations of the individual, it becomes an easy matter to accurately and mathematically raise or lower the atomic cell vibration to an estimated normal, and experience proves that in every case, without exception, normal digestion, assimilation, elimination and perfect health are the result. With the current given off by the Static Machine we can also, at will, raise or lower the volume of stored up electrical energy or vital force. It is also within our power to completely relieve the banked up nerve forces previously referred to, through the same medium. To do this, put the patient on an insulated platform with bared feet; put a strip of lead about two inches wide and ten inches long along the spine next to the skin and extending above the collar; connect this with the positive pole

of the machine by an insulated cord. Then, with a wide-open spark-gap and the machine running at a moderate speed, test the extremities with the aid of a metal plate well grounded, in order to determine the length of spark obtainable. This often differs; the big toe of one foot will frequently give a much longer and fatter spark than the other, and the same will be found true as to the knuckles of the hand. Gradually approach the extremities being tested until a spark is obtained, and make careful note of the length and fatness of the same. Frequently the toes will come right up to the metal without giving a perceptible spark. In this way you generally may determine whether the electrical force is banked up around the nerve centres or is evenly distributed over the body and extremities. If it is so banked, you will get a very short thin spark, if any, from the extremities, especially the toes. In this case, place the extremities solidly on the grounded metal plate, especially the feet, and keep them there for from five to ten minutes, as seems desirable, with the machine running at moderate speed and spark-gap open about

two or three inches. In this way you overcome the banking-up of the electrical forces in the region of the main nerve centers and get them flowing in their natural channels throughout the body and extremities.

In a too slow atomic cell vibration you usually have a too low voltage. In this case, remove the ground plate, open the spark-gap to two inches and set the machine running at the lowest rate of speed that will furnish a continuous spark, very slowly raising the speed to, say, from a thousand to fifteen hundred revolutions per minute, and then, as slowly as possible, close the spark-gap without a hitch. In this way, you smoothly and on a gradually increasing scale increase the vibration of the electrons transmitted to the patient. Somewhere on this ascending scale of vibration (that can only be accurately determined when we have the ato-vibrometer) you pick up or become attuned to the atomic cell vibration of the patient and carry his vibration along up the scale with the gradually ascending vibrations of the electrical current. Keep climbing this slowly ascending scale until an estimated normal is reached, or slightly above

it. This repeat as often as may seem necessary and until health is restored. By this procedure you not only gradually raise the atomic cell vibration of the individual, but also fill him full of electrical force, thereby raising his voltage and increasing his vitality.

In some individuals with a too slow atomic cell vibration there may be as much electrical energy present as can be used to advantage, and to increase this would mean to aggravate the symptoms. In this class of cases, maintain the feet in contact with the ground-plate while otherwise following the above directions.

In low vitality with very sluggish action of eliminating organs, give a five-minute treatment from the negative pole with feet on the ground-plate, to be at once followed by the regular order prescribed above. This will set the electrons running riot and will wake up the whole system, increasing functional activity and elimination. This procedure is rarely necessary, and then only in extreme cases. Great care and watchfulness should be exercised while using it.

If you determine that the atomic cell

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vibration is too high and the retained electrical forces are at or above the normal (and this is generally so where there is excessive atomic cell vibration), then, before starting the machine, place the bared feet on the ground-plate and keep the spark-gap tightly closed. Now start the machine and run it up to top speed at once, say at two thousand revolutions per minute. When this speed is attained, slightly open the spark-gap and at the same time reduce the speed of the machine very slowly, and without a hitch, until the estimated normal is reached, or, if desirable, until the vibrations are slightly below the normal; say until the plates are revolving at about eight hundred or a thousand revolutions per minute. Somewhere on the descending scale of vibration you will become attuned to the atomic cell vibration of the person being treated, and will then pick it up, as it were, and carry the vibration down the scale with the vibration of the generated current until you reach or fall slightly below the estimated normal of the person.

You not only accomplish this, but you do it without increasing the volume of current

stored in the individual, and you may also at the same time, if there be an excess of voltage, reduce it to normal. Usually in excessive atomic cell vibration there is normal or excessive electrical force generated and retained, and it is not desirable to accumulate any more. In these cases, maintain the feet in contact with the ground-plate during the treatment. Raising or lowering the atomic cell vibration increases or decreases the electrical forces generated by atomic cell vibration. Thus the whole condition is governed by the vibration transmitted to the patient from the machine and by use of the ground-plate.

If you select the right scale of vibration, you will get improvement, or at least amelioration, at once. Even in cases where there is organic degeneration, relief will be manifest on the first or second treatment, and if the wrong scale be selected, aggravation will soon be apparent, and become so manifest as to emphatically indicate that the wrong scale has been selected.

EXPLANATORY NOTE

The frontispiece represents a very interesting scientific experiment, in which was demonstrated the actual existence of human voltage. This experiment took place in San Francisco, on November 11th, 1906, and was conducted by Dr. Albert J. Atkins and Dr. Emily A. Lewis, assisted by a corps of electrical experts, all of that city. In this experiment there was passed into the stomach of Col. Richardson two properly constructed and insulated platinum electrodes; to them was attached twenty feet of insulated copper wire. The other ends of the wire were connected with the poles of a sensitive galvanometer. The instant the platinum electrodes touched the walls of his stomach the galvanometer registered from seven to eight mille volts of electrical current. This is proof positive of the actual existence of human voltage, and that my demand for a volt meter to record human voltage is not a far cry.

After proving that electricity, gathered and stored in the human body, was flowing over the wires, by demonstrating and recording its voltage, the galvanometer was

removed and a microphone substituted and a telephone receiver was placed in the circuit. As soon as the connection was made the slightest movement of the microphone transferred sounds to the receiver which could be distinctly heard by placing the receiver to the ear.

"A microphone is a small, sensitive instrument which greatly magnifies sound, but only when charged with a current of electricity. The fact that the sounds could be heard proves conclusively that the circuit was charged with electricity. This was purely human electricity, there being absolutely no battery in the circuit. By this experiment we have shown the working of three mechanical instruments, all due to human electricity, viz: the galvanometer, the microphone and the telephone."

Can more proof be needed to substantiate our claims regarding human electricity and voltage, and the part it plays in organic life?

CHAPTER IX.

NEGATIVE ELECTRICITY AND ITS ANALOGUES —SULPHUR THE NEGATIVE ELEMENT OF MATTER AND OZONE THE NEGATIVE ELEMENT OF THE ATMOSPHERE.

As I can make use of negative electricity to elucidate so many points, and as I consider it the keystone of this great structure I am building, I will go into it quite fully, with illustrations, using Sulphur to show how it explains drug action and so many of the principles enumerated by the immortal Hahnemann.

Please note the position of Oxygen and Sulphur in the Periodic table. They are in Series 2 and 3 and Group 6. The therapeutic action of these two elements, as you will find in this chapter, keeping in mind the explanations given for their properties, would seem to indicate that, therapeutically speaking, they are in the wrong Group; this is especially true of Sulphur, for I am certain there is very little, if any, positive electrification in the Sulphur atom, much less than in any known element; therefore it would seem that Group 8 would be a much more

appropriate place for them. The therapeutic side of the different elements is a very important side to study, from the viewpoint of atomic vibration, and with the aid of this table, and while it will, I am satisfied, in most instances confirm the position of most of the elements in the table, in these instances cited it would seem to support the changes I suggest.

To complete a circle all the arcs must be present; if one is left out it is incomplete. The therapeutic side of the elements are needed to complete the circle and to confirm their position. Heretofore this evidence has not been considered in assigning them their position in the modified tables, and I would suggest to the eminent chemists and physicists who regulated this matter that they give attention to this point, and I am sure, if so considered, my position as regards these elements will be found correct.

Oxygen and Sulphur, advanced to Group 8 of their respective Series, would seem to occupy the position indicated by their known properties, as they are the base of the most active acids, and as the elements *most* widely distributed and most abundant

in nature and having the largest number of combinations of any of the elements. Their known action and influence over cell life would also bear out the above conclusion. Bear this fact in mind, that the nearer the top of the column an element is found, the greater proportionate number of negative electrons its atoms contain; with a proportionate gradually decreasing positive electrification, until, as we will show, as in the case of Sulphur, that there is very little, if any, positive control present, and in Oxygen that the positive electrification is so slight that under certain conditions it is for the time being readily overcome.

I will endeavor to prove by analogy that Sulphur is the one element of matter whose atoms are composed only of negative electrons, and that, if it should be proven that the Sulphur atom does contain a few positive electrons, they are so few in number as to exert no control over the vibrations of the great mass of negative electrons that make up its atoms. Also, to show that ozone is simply the Oxygen atom in the atmosphere that has come in contact with masses of negative electrons and for the

time has been overpowered by them, thus liberating the electrons and letting them run riot, making of them a force without control which we know as ozone; and furthermore, that after the Oxygen atom passes from under the control of the mass of negative electricity it resumes all its former properties, the positive electrons resume their sway and control the vibrations of the negative electrons as is their wont, and it is once more Oxygen.

To the Electro Chemist I will leave the proving or disproving of these points. I have neither the training nor the delicate instruments necessary to accomplish this. Only as a practical observing physician, watching the practically identical therapeutic action of these three agents on the human system, have I arrived at the above conclusions; testing them by the electronic theory and its logical outgrowth, the theory of electronic atomic cell vibration as herein set forth.

Thinking that it might be of interest to my readers to follow the processes of *reasoning* and the facts that have led me to

the foregoing conclusions, I will endeavor to give them in detail:

The electronic theory teaches that the atoms of all matter are composed of numerous electrons that are at all times in a constant state of motion or vibration; that the electron is the electrical unit and that the negative electrons are greatly in excess of the positive; but that the positive electron controls the vibrations of the negative ones and holds them within the atom. Carrying the above to its ultimate and logical conclusion, I have evolved the theory of electronic atomic cell vibration as the basis and only explanation of organic life. The electron in the atom and the atom in the cell, and all in constant vibration, is, on the material side, the life of the cell; for, as this theory teaches that the violent vibration of the electron in the atom creates magnetism, so the vibration of the electron in the atom and that of the atom in the cell must create a magnetism peculiar to the cell or group of cells called organs and tissues, and by this means endows them with that power of attraction and repulsion which enables them to attract their normal

food elements and to repel the elements they do not need. This explains the power of cell attraction and selection that we have so long recognized but for which we could offer no satisfactory explanation.

In studying the above theories, I was impressed by the numerical predominance of the negative electrons within the atom and their being held within bounds by the much smaller number of positive electrons.

The thought came to me, what would happen if these positive electrons should be, for a time, overpowered or their control suspended for a stated period? There was but one thing that could happen; the negative electrons would have their liberty, would run riot, would go off at a tangent, and would become, literally, a force without control. Then the question was: Is it possible to separate the negative from the positive electrons? Is it possible to have a mass of negative electrons only, entirely free from positive electrons and their control? Prof. Lenard, of Germany, answered this question by putting an aluminum window in a Crookes tube through which the *Cathode* rays streamed like sunlight

through an ordinary window. This enabled him to determine that the Cathode rays streaming from the negative pole or disk were composed of negative electrons alone, and that they were traveling at the riotous pace of 50,000 miles per second. This proved two things: First, that the current flowing from the negative pole of the Electrical Machine to the negative disk of the tubes was carrying only negative electrons; and secondly, that they were without control and were traveling at a riotous pace.

It was but a short step from the above to the conclusion that, if this negative vibrating current was turned into the human body, it would still maintain the same general characteristics, and this we found by experiment to be a fact. We found that a treatment from the negative pole of the Static Electrical Machine was a positive stimulant; and that, for the time being, so long as the negative electrons held sway, it overpowered the positive electrons in the atoms of all the cells in the body; that it set them running riot; that they became a force without control and consequently a power for great good or an infinite amount of

harm, according to the method and time of use. Functional activity throughout the whole body was greatly increased; stimulation of the whole nervous system was very perceptible and sometimes produced unbearable irritation if continued too long, or when unadvisedly used; and this was equally true of the circulation of the blood. I quickly learned that this negative element called for the exercise of great caution and good judgment in its use, and that it was best to profit by nature's example and always leave the positive electrons in control. To accomplish this, I follow a treatment from the negative pole by at once giving a treatment from the positive pole. The first treatment for the time being overpowered the positive electrons in the cells of the body by sheer force of numbers, and electronic atomic cell vibration runs riot. It is the greatest general stimulant nature has provided for organic life. Its use should be immediately followed by a treatment from the positive pole; which, in turn, overpowers the riotous negative electrons and leaves the positive electrons in control, which is *the* normal condition.

In observing the action of the vibrating current from the negative pole on the human body, I was impressed by the similarity of the results produced to the therapeutic action of Sulphur and Ozone. They are practically identical, as we will later show.

Taking up Ozone first, as I could generate it at will and so could better study it, I found that it was a product of the negative current. All authorities agree that Ozone is concentrated Oxygen, and that "there is a marked difference between the properties of Oxygen and Ozone, yet Ozone materially considered is Oxygen and nothing but Oxygen. That Oxygen and Ozone are made up of the same kind of matter, since each is transferable into the other. The real difference in the properties of Oxygen and Ozone is due to the different amounts of intrinsic energy present in their molecules. There is more intrinsic energy present in the molecules of Ozone than in the molecules of Oxygen. As we would expect, Ozone is the more active chemically, and contains the larger amount of intrinsic

energy."—Prof. Jones, Principles of Inorganic Chemistry.

I fail to see by any process of reasoning or to discover by any experiments given, how, by simple concentration or condensation, Oxygen can take on this increased intrinsic energy or these other acrid, irritating active properties which we know to belong to Ozone.

A study of the electronic theory in connection with the Periodic tables readily explains this phenomenon. Especially did this become clear when we made a comparative study of the therapeutic action of Sulphur and Ozone, and we are thus brought to the conclusion that Ozone is the relatively negative element of the atmosphere. In studying the production of Ozone by my Static Electrical Machine, and keeping in mind the action of the negative electrons and results following their use, I arrived at the conclusion that Ozone is the normal Oxygen atom, brought in contact with a compressed body of negative electrons, which for the time being partially overpowers the positive electrification. This in part frees the negative electrons from their normal natural

control, and for the time being this Oxygen atom loses its identity and becomes relatively a negative element with all the characteristics of the negative forces, and we know it as Ozone with all its peculiar properties and characteristics. As soon as the Oxygen atom passes beyond the control of the body of negative electrons it ceases to be Ozone and resumes all its former properties and is once again Oxygen; for the positive electrons have resumed their sway and it is its old orderly self once more. Humboldt conceived the idea that the presence of Ozone was owing to an unusual amount of negative electricity in the atmosphere. If it has not already been so determined, the electronic theory would warrant us in the belief that lightning is simply a mass of compressed negative electricity running riot, going off at a tangent, a force without control flying towards the earth, which is the positive element.

We will, perhaps, get a better idea of what lightning is, and how it can produce these results, by taking note of a prediction made by Mendeléeff, in his last days, as follows: "That there is one more inert gas

not yet discovered, which is inconceivably light, at least a million times lighter than Hydrogen." This, he thought, was the mysterious ether pervading all space and did so because it was so light, and this is the reason it has not as yet been caught and weighed.

He, not believing in the electronic theory, claimed that the newly discovered electrons, corpuscles and variously named emanations, like those given off by radio-active substances, are nothing but these thin ether particles.

I am fully convinced that when this all-pervading ether is analyzed it will be proven that it is composed wholly and only of disembodied negative electrons. If one will only consider for a moment known phenomena, the possibility and probability of this assertion is made apparent by reasoning from comparison.

He claimed that this ether traveled through space at approximately 100,000 miles per second. This is about the same rate of speed of the Radium emanations, called B-rays, which are known to be composed only of negative electrons flying from

the lax control of the relatively small number of positive electrons in the Radium atom, and it is also in the neighborhood of the speed traveled by the Cathode rays when produced by a high potential and which are also negative electrons. The phenomena of lightning is also thus explained; this ether, composed wholly of negative electrons, is in some way not yet understood, put under stress, it escapes from its bondage and flies toward the earth, which is the positive element.

The greatest producer of Ozone is lightning. In its travels through the atmosphere it comes in contact with Oxygen atoms, overpowers in part the controlling positive electrification, which for the time being, in a relative sense, liberates the negative electrons, thus giving us the negative Oxygen atom that we know as Ozone, with all its negative properties, that is so prevalent during electrical storms. This same phenomenon is produced in miniature by the Static spark.

What we know as Ozone the ancients called Sulphur fumes, and the thunderbolt was regarded as the product of fire and

brimstone. Homer repeatedly refers to objects that were struck by lightning as having the smell of smoking Sulphur. In the Iliad lightning is represented as a flame of burning Sulphur striking a ship. The Prophet Isaiah, in speaking of lightning, says, "The breath of the Lord like a stream of brimstone." This was entirely excusable, as the odor of Sulphur fumes is identical with that of Ozone. They both are pungent, acrid and irritating to mucous membranes if too strong. They have the same smell and taste; their action as a deodorant, germicide and antiseptic is the same; they are equally destructive to all fungi and microscopic life of every kind; they are great purifiers and deodorants; they have the same bleaching properties. Therapeutically they act on the same general lines, and, as an inhalent, Ozone corrects the same general septic conditions that the Sulphur compounds have long been recognized as controlling. They can, in these conditions, be used, one or the other, as convenience dictates, with the same general results, and can always be depended upon.

With these facts before us I naturally took up the study of Sulphur and was immediately impressed with the similarity of its action, in a therapeutic sense, to that of the vibrations given off by the negative pole of the Static Electrical Machine. Their action was identical, as I will presently show, and I soon arrived at the conclusion that before the last word was said it would be ascertained that the Sulphur atom was composed only of negative electrons; or if it should be determined that there were a few positive electrons present they would be found relatively so few in number as to be of no moment in controlling the vibrations within the Sulphur atom.

In studying the properties of Sulphur these things become apparent: It is the base of the most active of acids and the one most destructive to all organic life; as an antiseptic and germicide, it has but one equal, and that is Ozone. Its fumes are destructive to all organic life, its use in the arts and sciences and everywhere else bears out the claim that it is a force without control; an element running riot; matter going

off at a tangent. And this is literally true. It is the personification of negative electrons let loose. It has always and in its every sphere of usefulness, the same story. No matter in what combination we find it, we there find its yellow head, pungent breath and acrid, nauseating taste. Like Banquo's ghost it will not down, but always bobs up serenely. In every one of its compounds, no matter how disguised, it is easy of recognition. What think you? Was it an accident or was it an instance of revealed scientific fact that brimstone was selected as the one element out of the whole universe to typify the force that is without control, matter running riot, constantly at a tangent, and that is expressed by the words "eternal punishment?"

These facts regarding Sulphur are so palpable and are so fast coming to be generally recognized, that one of our prominent authors, Gelett Burgess, recently spoke of a certain class of human beings, calling them sulphites, saying, "the sulphites class of humanity do their own thinking, eliminate the obvious from their conversation, *and have* surprises up their sleeve." Thera-

peutically, Sulphur retains these peculiarities, as we will show.

Burt says: "Through the great vegetative nervous system Sulphur acts upon every organ and tissue in the body."

Boericke: "Sulphur causes inertia and relaxation of fibre. Hence feebleness of tone characterizes its symptoms. When carefully selected remedies fail to act, it frequently arouses the reactionary powers of the organism; also in complaints that relax."

Nash: "When seemingly indicated remedies do not cure, use Sulphur."

Farrington: "It may be assumed that, as a general characteristic, Sulphur causes congestion to all parts, and as a reactionary agent it frequently serves to arouse the reactive powers of the system when the carefully selected remedies have failed to produce a favorable effect."

The key note of Sulphur is, it stirs things up; its fumes are pungent, irritating and active; its acids are the deepest acting, the most corrosive, the most destructive to tissue and even to life itself; its every symptom points to its activity and indicates its

stirring up qualities. Right here is one of the most positive proofs of the law of similars we are likely ever to find, when we observe that Sulphur, the negative element of the universe, composed only of negative electrons, is nature's greatest of cell stimulants. All cells contain their atoms of Sulphur, these negative Sulphur atoms always acting with violence, always a force without control, going off at a tangent. See how the electronic theory and the theory of electronic atomic cell vibration so fully explain and prove scientifically the basic principle of the Homœopathic law of similars!

Boericke says that Sulphur in large doses causes inertia and relaxation of fibre; hence feebleness and lack of tone. Over stimulation always means that feebleness and relaxation are bound to follow. The riotous Sulphur atoms, if given too freely or for too long a time, overstimulate all the cells of the body, thus causing them to lose tone; and we have, as a consequence, inertia and relaxation as the key note to all the symptoms that indicate the use of Sulphur; and we know by long experience that it is when *these* conditions are present and in this class

of cases, that Sulphur has proven its great worth.

Cowperthwaite says of Sulphur: "It affects profoundly the entire vegetative sphere, penetrating deeply every recess of the human body. Precisely how this mighty agent operates, and exactly the channel through which it produces its wonderful changes in organic and functional life may not be definitely known, yet the effects of these operations are ever before us and offer conclusive evidence as to the character of the remedy in its general constitutional action."

It is only through a full understanding of the theory of electronic atomic cell vibration that the action of Sulphur can be explained. The full explanation only comes when we recognize it as the negative element, and this is just what it is. It is the one element in the universe of matter whose atoms are composed wholly and only of negative electrons, always behaving like a turbulent mob, always in violent vibration and without any controlling force. This is the key to its whole sphere of action and it

thus supplies the explanation for its every symptom.

The Sulphur atom is always found in the albuminoids and through them enters especially into the life of all young cells, which thus become the physical basis of muscle, nerve, connective and mucous tissue; and so it is readily seen that if there be a deficiency of Sulphur atoms in the system or cell, its functional activity will be sluggish because of sluggish cell vibration and a low magnetic field; and we also see how impossible it would be to arouse it if the normal Sulphur atoms were not present, and that by adding the riotous Sulphur atoms with their vibrations acting continuously as though without law, how it would stimulate cell vibration, arouse it to new life and create the normal magnetic field which was lacking; and that after this stimulation was accomplished the cell or the mass of cells would again attract the normal atomic elements; which means normal function and a rapid restoration of health.

In treating patients with the Static current the positive pole is the one generally used, and with it electronic atomic cell

vibration is completely within our control, so that it can be raised or lowered at will as seems desirable for the restoration of normal cell vibration.

I have found in using this agent, as I find in administering drugs, that the condition above described that indicates Sulphur, makes its appearance; and that while, up to a certain point, steady progression is made towards the normal, this progress ceases and the case stands still. Now throw in your negative electrons—give a treatment from the negative pole, and all is changed. The patient wakes up, electronic atomic vibration shows excessive activity, all functional activity is increased, the eliminating organs take on renewed activity, and improvement again commences and steadily progresses towards a cure. It is easy to observe its identity with the well-known action of Sulphur.

This procedure should be used with great caution; for, while it is the most wonderful stimulant to all bodily functions and to all cell life, there is great possibility of over-stimulation, and great harm may be done if it is called into use when not fully indicated,

or at too short intervals. I cannot lay too great stress on the extreme caution necessary in the use of this negative current. In every case a treatment from the negative pole should be at once followed by a treatment from the positive pole, so as to leave all vibration under control of the positive electrons. By letting loose this riotous negative element into the system the control of the positive electrons, for the time being, is overcome, and the negative electrons, liberated from this control, run riot and wonderful stimulation is the result. This is experienced by every cell, organ and tissue of the organism, and an infinite amount of harm is possible if carried too far or allowed to go on too long, or if repeated at too short intervals, or when not fully indicated. This is the one and only place to use negative electricity; it is its one and only use without the risk of working great harm.

To restore electronic atomic cell vibration to the normal, means restoration to health, and the Static Electrical Machine is the only apparatus by which it can be done. *Vibration*, as I have shown, is the law of

life. This could not have been determined previous to our being in possession of the electronic theory, and consequently all our text books on electro therapeutics fail to take cognizance of it, and make no distinction between the positive and the negative currents.

The therapeutic action of Static electricity as it is too frequently employed is in the line of drawing sparks from different parts of the anatomy or creating a breeze from the head, which is usually the wrong end of the patient from which a grounding should be made, or in storing up electrons without knowledge as to which class of electrons may be indicated, or often without caring whether it be positive or negative electricity that is used. Out of this has grown up what is known as the High Frequency Treatment, which means high vibration and the storing up of electrons in the body. By these methods harm is done quite as frequently as good, and the reason becomes apparent when one understands the electronic theory and the theory of cell vibration. In drawing sparks from the body, all that is accomplished is an irrita-

tion of the parts with possible control of the local circulation and stimulation of muscular contractility. In using the High Frequency current, when the cell vibration of the person is not already too high, it may be of some service in raising the cell vibration, but it is very much like a man trying to lift himself by his boot straps. It also stores up or fills one full of electrons indiscriminately, when the patient probably has all the stored up energy he can conveniently use, and more may act as a positive irritant and only increase discomfort. These are the reasons why it is so often that people say: "No electricity for me; it may be all right for other people, but none of it for me. I have tried it to my injury."

If the theory of electronic atomic cell vibration is the law of life, if the electronic theory be true, then there is no limit to its application when used understandingly. It fits into the needs of every one, regulating the life processes and restores to normal health. The law of cell vibration means that the electric current, as a means to an end, must be used to increase or decrease cell vibration. The vibrations of the electrical

current must be gradually increased or gradually decreased in order to control and govern the cell vibration of the human body. If administered otherwise, it simply fills up or stores electricity in the body, and, as we have shown, this may not be always desirable. In fact, it may often act as a positive irritant. A stationary spark-gap or a given rate of speed will not regulate cell vibration. It only fills one full of electrons.

By centrifugal force the Static Electrical Machine collects the electricity from the atmosphere and centrifugally segregates the negative from the positive electrons, throwing the positive to one side of the machine and the negative ones to the other side, thus making it possible to throw either positive or negative electrons into the body as the case may require.

If it is desirable to use the negative current, attach the cord to the negative pole and give a treatment just as if using the positive pole; but be sure to at once follow it with a treatment from the positive pole so as to leave the positive element in control.

As to the therapeutic identity of Ozone with these others of the trinity, tests made in the hospitals of Berlin, Germany, showed that it is effective as a curative agent in contagious diseases of all kinds, especially in malignant Diphtheria and Typhus.

Its action is immediate and intense, and is especially directed to clearing the system of impurities; and is indicated with equal certainty in imperfect digestion and assimilation, defective and faulty innervation, in diseases of imperfect oxidation of the blood. It also has a powerful action on the brain and spinal cord.

Drs. Languir and Fingeros, of the French Medical Faculty, have employed it in gangrene and specific ulcers with great success. Dr. Golden, of St. Thomas Hospital, London, highly recommends it in this same class of cases, both for internal use and as a local application.

Prof. Preger, of Jena, recommends it as *the* antidote for Prussic Acid poisoning, and in asphyxia caused by coal or sewer gas.

Dr. G. Herman Merpel, of Boston, says Ozone enables the indicated medicines to do *their* part more effectively. It stirs up

morbid processes, stimulates the nervous system, and is especially useful in the treatment of impairment and weakness of the nervous and muscular system. It exercises a restorative influence in convalescence after long and exhaustive illness, counter acting a tendency to relapse.

While the language is somewhat different in some instances, in others it is almost identical with that used and quoted above regarding Sulphur; and it will readily be seen that the general trend of its action is to stir up and wake up the system.

CHAPTER X.

DISEASE, WHAT IT IS, AND HOW CAUSED.

How does this new understanding of matter effect our understanding of diseases and their causes? What is disease? It is disturbed function and nothing else. How can function be disturbed? It can only be disturbed in seven different ways. See how this simplifies the whole matter. Indeed, the theory of electronic atomic cell vibration so simplifies our whole understanding of life's processes, the diseases which assail it, and how to cure them, that I am afraid its very simplicity will be a stumbling block to many who are used to the incomprehensible hair-splitting symptomology. Christ said, while teaching the simple life, "it may be a stumbling block to the wise," and so it has proven. In medicine, as in theology, the tendency has been to multiply the mysteries; to befog and confuse with the multiplicity of diseases, until the primal cause has been lost sight of.

Let us get back to our premise: namely, a normal atomic cell vibration, normal voltage, with an even distribution of the vital

or electrical forces that means absolute perfect function and health. Abnormal massing of the stored up electrical or vital force in the region of the principal nerve centres, the brain, spinal cord and solar plexus, abnormal voltage and abnormal atomic cell vibration, either excessive or deficient, is *per se,* what we know as disease.

Methinks I hear some one with "Mick robes" on the brain crying, "Heresy! Heresy!" Let's see. I believe there is a common ground on which we can all meet. If there be absolutely perfect functioning, we will all agree, I think, that no micro-organism can get a foothold in the system. Which is the wisest course then? To fight the effect and antidote the microbes, or remove the cause by restoring normal conditions on the line of restoring the cell vibration and voltage to the normal, and procuring an even distribution of the nerve forces throughout the body; in this way, with mathematical precision, throwing off the detritus.

Twenty-five years of chasing the microbe has yielded but little except to increase mys-

ticism and confusion, and make a babel of tongues. Hahnemann, seventy-five years ago, in his thesis on chronic diseases, gave us all and more than has yet been revealed by bacteriological research; indeed, he forestalled every fact so far determined, defining its limitations and indicating their practical application in the relieving of diseased conditions. Health means absolutely normal function, normal digestion, assimilation and elimination, and this means normal cell feeding and perfect elimination of debris. All this depends upon normal atomic cell vibration and the other conditions named in connection with it.

Disease is its opposite and manifests itself by interfering with the digestive processes and causing mal-assimilation, malnutrition, imperfect cell feeding and non-elimination of the toxins produced in the body by tissue metamorphosis and the non-elimination and non-neutralizing of the toxins entering the system from without. It is this and this only.

Anything that interferes with normal cell vibration, normal distribution of the vital

stored up nerve forces, or normal voltage, causes disease.

Cell vibration may be excessive or deficient, it may be above or below the normal. Man is not only a collector of electrons but a storage battery as well, in which the electron is stored up to meet any emergency that may arise. We call this electrical force, vital energy or human voltage, consequently there is normal and abnormal voltage, and this, too, may be excessive or deficient. It may be only apparent or it may be actual; this is an important point to determine, especially in a too slow atomic cell vibration, where usually there is present a too low voltage and it is necessary to store up electrons. In some cases with a too slow cell vibration the system will be found to have all the stored up energy it can use to advantage. In this class of cases, to store up more electrons would be to add a burden and to cause irritation and an aggravation of all the symptoms; this point will have to be determined by watching for aggravations, which are sure to quickly show themselves, thus determining that the other method should be followed, for a time at

least. If storing up electrons causes an aggravation of symptoms, for a time use the foot-plate throughout the whole of the treatment; then after a short time the foot-plate can be removed during the latter half of treatment with advantage.

That there may be engorgement, congestion and storing up of blood at the main nerve centres, brain and spinal cord, we have long known, and that it is a serious complication is generally recognized. I am convinced, and I think it is easy of demonstration, that the nerve fluids or forces are much more prone to bank up at these points, and when they do so bank up, that they cause much greater systemic disturbance than does the former condition. In fact, I am convinced that the latter condition is responsible for the first named condition. This condition may be caused in various ways, and is, I am sure, generally the primal cause of disturbed function.

There may be introduced into the system from without poisonous or destructive elements or micro-organisms, and these may be so active and so disastrous to cell life that there is no time to antidote or eliminate

them. If they be less active, an antidote is called for: but be careful that the antidote is not a greater menace to cell life than was the original devil. When there be time to neutralize and eliminate the poison it will be found that to mathematically regulate cell vibration and voltage, putting and keeping them at normal will go a long way toward removing the poison.

If there be any mechanical interference with the even distribution of the nerve or vital forces to all parts of the body, these must be removed before normal vibration and normal function can be restored. This is the place for surgery, not destructive but constructive surgery. Never ruthlessly destroy a single cell, every one has its use, even ovarian cells; there may be some who have never realized this, but for a certainty it is so.

The first thing after determining that the cell vibration is abnormal and that the vital force is not being evenly distributed, is to determine the causes for these abnormalities. First determine if there be destructive elements present that may safely be antidoted, then examine carefully for

any source of irritation or pressure to nerve trunks, nerve branches or nerve filaments that may, by direct or reflex action, interfere with the even distribution of nerve force. This impingement may be caused mechanically by a tumor or displaced bone, or adhesion, or by muscular rigidity. Fibronous deposits or enlarged glands may also interfere with an even distribution of the nerve forces, or it may be a circumscribed death of a part that is interfering with electrical transmission.

These conditions must be corrected before normal vibration can be restored and normal functions resumed. The impinged nerve must be released from its bondage, pressure must be removed, deposits removed or absorbed, and so on, before nerves can perform their functions and before cell vibration can be brought back to normal.

The wise course is to do this in the easiest possible way, with the least destruction of tissue and with the minimum of shock. That this course is not always followed, I am sorry to admit.

The symptoms indicating excessive cell vibration and an excess in voltage are not

hard to recognize. They are high strung nervous conditions, excessive energy in whatever manner manifest, high bounding hard pulse, active conditions generally, active delirium, spasms, undue mental activity. We all know the picture so well and its presence in the various diseases, that it is not necessary to elucidate further. It only remains to caution against mistaking this condition for the only one resembling it, and that is an irritability depending on debility which closely simulates this condition of high tension, and it will often take very close observation to avoid making this mistake. If a mistake in diagnosis is made on either side, aggravations will manifest themselves so promptly and with so little uncertainty that it will enable a speedy correction in diagnosis and treatment.

In these cases of irritability, dependent on debility, the patient has usually been keyed up to the pitch of the performance of real or seemingly necessary duties. In other words, he has been doing whatever was necessary by sheer force of will, keeping himself up to the emergency. Always in these conditions of false strength, when

you get them on the right scale of vibration, there is sooner or later and more or less pronounced, according to how much they have been forcing themselves, a complete letting down; in fact, they must be let down to their actual condition of strength, the false bottom must be completely knocked from under them before improvement will set in. In some cases this letting down may go on to complete exhaustion, but nothing is to be feared as bed rock must be reached before improvement will set in, and from this point improvement will be marked and steady progress will be made.

In a too slow atomic cell vibration there is generally, but not always, a lowering below the normal of the stored up electrical forces. I often find that in a given case one's system is generating all of this vital force that it can conveniently use, and when this is so, to store up more means to cause an aggravation of all the symptoms present, so that care should be used in storing up electrical energy in this human storage battery.

When atomic cell vibration is below the normal, we have a picture more or less

morbid, according to the degree below the normal reached. This is easily recognized as a lowering of the vital force. The pulse is either slow, weak, soft, or perhaps slow and full; or it may be high, but easily compressible or thready; all function is slow, sluggish, tissues soft, flabby or emaciated, congestion, stasis, stupor, low muttering delirium, sluggish brain, engorgements, either local or general. This picture is also very familiar and needs no further elucidation.

We have mentioned that the fifth abnormal condition is a banking up of the stored up forces in the region of the main nerve centres, the brain, the spinal cord and the solar plexus. I am convinced that this is the primal cause of disturbed function. This condition is easily produced and may be caused in many ways. Over-taxing or undue irritation of the stomach is a prolific cause, causing concentration of nerve energy to do the extra work; this, if long continued, will produce it. Prolonged mental effort is another cause, prolonged physical exertion to the point of exhaustion, especially if followed by over-taxing the

stomach, is another cause that produces cerebral localization of the nerve forces to the detriment of the outlying tissues. If this is kept up unduly, we have not only disturbed circulation of the blood, with local engorgements and congestion of the more vital organs, but what, I am convinced, is much more common, and fraught with much graver consequences, a centralization or banking up in these regions of the stored up energy or vital force. It will be readily understood how the strenuous life we lead has a tendency to produce this condition.

The symptoms indicating this condition are a full feeling in the head, but not neuralgic. It is hard to think; it is a positive effort to do so and to arouse the brain to action. This is usually accompanied with cold feet, indeed cold feet is the keynote to this condition, coupled with soreness and pain at pit of stomach. When the banking up is present all function is impaired and this deprives the cells of their proper food elements and produces a changed magnetic field and a slowing down of vibration. Thus is seen the endless chain it produces and the long list of diseased conditions it is

liable to promote if continued for any length of time.

This condition calls for the use of the foot-plate during the whole or the first part of the treatment, and by using it, it will be entirely relieved and an even distribution of the nerve fluids procured.

Electricity used in any form, or in any way under these conditions, can only result in general aggravations all along the line, and only by use of the foot-plate, well-grounded, with the bared feet in contact with it, can this be avoided. The vibrating electrical current starting at the base of the brain follows the ramifications of the nerves to all parts of the body and then seeks the foot-plate at the extremities and carries with it the banked up nerve forces to the distant parts, thus re-establishing the flowing of the nerve forces in their natural channels and overcoming this banked up condition, which it is necessary to do before atomic cell vibration or normal function can be restored.

How simple this all is: it is getting down to first principles. It does not take volumes to describe diseased conditions,

splitting hairs all the while, to the more or less complete mystification of the reader.

Before a surgical operation give several treatments for the restoring of normal cell vibration through the medium of the vibrating electrical current. It makes surgical operations safe, reduces shock to a minimum and induces strong and regular heart action.

What diseased condition is there by whatsoever name called, whose primal causes are not convered fully and intelligently by the above?

Why waste so much valuable time in nomenclature, in multiplying symptoms to the confusion of reason and understanding, and to the detriment of the patient. Let us brush away the mysteries, the cobwebs, and get down to basic first principles. With mathematical precision all these conditions can be controlled by the vibrations of the current given off by the Static Electrical Machine, it being the best means at present available.

CHAPTER XI.

THERAPEUTICS OF LIGHT—ARC AND INCANDESCENT LIGHT BATHS—THE LEUCODESCENT LIGHT.

Electric lights, both arc and incandescent, are great aids in restoring normal cell vibration. That they increase cell metabolism to a considerable extent is true, but their principal action is to flush surface capillaries by bringing about capillary relaxation, thus opening up the flood gates, as it were, and overcoming the damming up of the blood in the region of the internal organs, thus relieving all internal congestion, and they do this better than any other agent I have ever used.

In flushing the surface capillaries the blood, loaded with impurities, is brought to the sudorific glands, where it unloads the debris in the form of free perspiration, to the great relief of the other generally overtaxed excretory organs.

They accomplish these results because the vibration of the light waves are somewhat higher than is atomic cell vibration. Their action is to pick up, to stimulate atomic cell

vibration to its highest safety pitch, thereby stimulating the circulation without increasing blood pressure, the arc light giving the lower blood pressure of the two. They do not increase blood pressure, because the more profound action is on surface capillaries, which it overstimulates to the point of relaxation, thus making an outlet for the pent up blood and reducing tension. This is the reason why light baths are so much safer than dry heat or steam baths, because they act more promptly on the surface capillaries, relaxing them and reducing blood pressure almost instantly, thus making them safe even for bad heart cases, the dysmæ being relieved immediately and high pulse and high tension is relieved at once.

The leucodescent rays, produced by the Leucodescent lamp, is always of great assistance in restoring normal conditions; it is directly antithetical in its action to the light bath. It contracts capillaries, if not used too long; it does it by stimulating atomic cell vibration and tones up and contracts capillaries, both surface and of the deeper tissues. That its vibrating light waves penetrate to and through the deeper

tissues and cavities of the body is absolutely true, I am sure, from results obtained in a wide range of cases, and in doing so it effectually destroys all lurking germs. It has no equal as a bactericide. It being both safe and efficient, no germs can hide from or escape its penetrating rays, and it not only does this without injuring surrounding cells, but it in fact imparts to the tissues vitality by increasing their atomic cell vibration. It is indicated in local circumscribed conditions where there is pain, tension, discomfort, blood stasis, engorgement, passive or active congestion, or local inflammation. These conditions it controls readily and permanently; this is especially so if it is preceded by a cabinet light bath to cause general relaxation, when a treatment by the Leucodescent rays tones up and contracts the diseased capillaries. The Leucodescent light can be applied either by focusing the rays in a small circumscribed area to get deep penetration, as in ovaretis or appendicitis, or by moving it over the diseased surface at a slow pace at close range.

CHAPTER XII.

MEDICINES ABSTRACTLY CONSIDERED—CELL FOOD—CELL STIMULANTS—THE LOGIC OF POTENCY AND TRITURATION.

What about medicine? They are less direct than the vibrating electrical current in their influencing of atomic cell vibration, and less positive in the influences exerted, because the electrons forming the elements of which all medicines are formed lack the high potential that is imparted centrifugally by the Static Electrical Machine to its vibrating current. All that is needed to put the prescribing of drugs, as well as the other methods herein outlined for controlling atomic cell vibration, on the basis of an exact science, with mathematical precision, is the ato-vibrometer and the volt meter; with these instruments perfected so as to accurately record human voltage and atomic cell vibration, it will be easy to determine the action of any given agent, be it the vibrating electrical current, vibrating sound, heat, or light waves, or be it organic or inorganic medicines, or be it thought vibration, it matters not which it be, their

action on atomic cell vibration will be easy of recognition and can be determined with mathematical accuracy.

May the all-pervading, universal and all-controlling intelligence speed the day for the sake of suffering humanity, and the general uplifting of the race, when these instruments of precision will be an accomplished fact.

In that day the healing of the sick will be an exact science, the absolutely definite action of any and all medicines on cell vibration can be determined, and the stage of cell vibration calling for their use will also be definitely established. This will relegate guess work, all uncertainty in prescribing, and all controversy to the past ages.

Suppose we drop the word medicine. It has served its purpose, has outlived its usefulness, and, in fact, among a large part of the intelligent, thinking people of the community, is in disrepute. Whether deservedly so or otherwise, I will not say.

With the new understanding of matter and a recognition of what the organized cell is composed of, is it not wise to coin a new and more expressive term to indicate

our greater knowledge? Everything influencing the cell for good must act on the line of supplying deficiencies, that is, of feeding the cell, and must be a food element, or a cell stimulant. To influence the cell it must have a vibration in accord with it and a similar magnetic field, for otherwise the cell cannot attract it to itself, neither can it get sufficiently in harmony with the cell to influence or stimulate its vibrations. We can only get near the cell by a cell food or a cell stimulant, which must of necessity be one of the natural elements, for there is nothing else in the universe.

I think cell feeding a much more comprehensible term than medicine, and when we understand the subject as we should and will, it will be very rare that it will be necessary to use other than a cell food. This is just what we do when we use the earth salts, or atomic groups, that normally enter into the formation of cell life. Remember this is all we get in any of the vegetable remedies, and the only way they can influence cell life is to supply deficiencies, thereby influencing cell vibration.

Cell feeding, supplying deficiencies, is the

sine qua non of scientific medication. Dr. Schusslor recognized this, indeed, it is the principle of Bio-chemistry. Prof. Brown-Sequard also recognized it when he advocated the use of testicular juice as the elixir of life. The direct outgrowth of the teachings of Brown-Sequard is the Roberts Howley Lymph Compounds; it is the latest recognition of this principle, and the most scientific and available, and accomplishes the results desired. The natural elements that enter into cell life are *per se* cell food; they act on the cell by their vibration, and combined as they are in a cell they vibrate in unison, causing cell vibration and a magnetic field peculiar to the cell and group of cells known as organs or tissues.

Any one element entering into a given cell influences the vibration of the cell by raising or lowering it towards its own vibration. Right here is the explaining of a vital law of Homœopathy, as we will later show in Chapter XIII, using Carbon to illustrate it. It is this: that an element can only influence cell vibration just so far, and no farther; then its complement, an element with a slightly higher or slightly

lower atomic vibration, steps in to influence cell vibration yet a little farther, and so on until the normal is reached, no one element being able to carry vibration (if it be very far from the normal) up or down to the normal; it can only be done by one element succeeding another element on a continuous scale. This is equally true in the use of the vibrating electrical current. To me this law of succession was one of the hardest to understand, but here we have a perfectly logical, scientific explanation. Another law hard to understand has been the dynamic action of drugs, sometimes called the spiritual action of drugs. It will be readily recognized that atomic vibration of matter, organic or inorganic, is identical with and fully explains and defines the term dynamic action and the phenomenon it stands for, and thus we will go on showing how electronic atomic cell vibration scientifically and logically fully explains all the laws governing drug action laid down by Hahnemann.

When we, as a profession, fully realize that any substance that becomes a part of organic life must be divided into particles

sufficiently small to be appropriated by the individual cell before it can influence the life processes for good, then we shall cease to use crude, inorganic substances with the view of obtaining this influence. Sulphur serves to illustrate this point. As a crude substance it is useless and in every instance its atoms must be liberated so as to have room to act; that is, to vibrate. I know of no instance in medicine, mechanics, the arts or sciences where this is not so, and the rule applies to all other elements or atomic groups. In effect, this is the philosophy of digestion. This is the purpose of the whole digestive act, namely, to break up, to triturate, to return the elements to their natural groups of atoms so they can be once again appropriated by the cell and organized into tissue.

Where is the common sense or logic in putting crude elements or groups of atoms, such, for example, as the iron preparations or the salts of Lime or Sulphur, into the stomach, to be there triturated, subdivided and put in condition for assimilation and appropriation by the cell, when it can be done much more certainly and with much

less wear and tear of a much abused organ by mechanical trituration? The great mass of inorganic medicines put into the human system act only as an irritating body and pass through the alimentary canal as such, and are impossible of being appropriated by the cell because of their massiveness, their particles being often larger than is the cell, the digestive processes not being able to break them up into their original atoms, which is necessary before the cell can attract and assimilate them.

This fully explains the necessity of trituration and potentization, especially of inorganic elements. Nature has performed this office in the organic remedies, both animal and vegetable, so in these there is not the same necessity for it.

The potentization is more necessary and should be carried higher in those elements known as cell stimulants, because of their very high atomic vibration and because they can only influence life by vibration, which is much higher than is cell vibration. If these are put into the system in too great a mass they cause death of the cells. Potencies not

high enough of these cell stimulants, are capable of more harm than is the crude element, because the too low potency can get into the circulation and therefore can unduly influence cell vibration, while the crude substance would simply pass through the digestive tract as a foreign body.

Why medicines have an affinity for certain organs and tissues, why they affect or influence certain structures only, is now for the first time made apparent. It is easily understood when we understand atomic cell vibration, and a special magnetic field for a given organ and tissues, and that an element, be it either in the form of organic or inorganic substance, is only capable of reaching and influencing the cell organ or tissue having similar vibration and a congenial magnetic field.

Medicines may have three lines of action, chemical, as for instance when Sodium Bi-Carb. is used to correct an acid stomach to neutralize the excess of acid present, or Carbo-Veg. when used to absorb gases in the stomach and intestines.

Secondly, medicines that act only as they

irritate mechanically the tissues with which they are brought in contact; of which castor oil is a typical example.

Thirdly, physiologically or dynamically. Until recently I would have maintained that these were two separate actions, but now I know differently; they are only different degrees of the same action. The physiological action of a medicine is simply a mass action, or, more properly, a mass vibration; the medicine is put into the system in sufficient quantities to bodily, as it were, pick up cell vibration by their volume of vibrating force, thus influencing the cells over the whole body profoundly and at once, and *en masse*. In many instances this is necessary and best, and the wise course to pursue; often there is no time to do otherwise. In giving the smaller dose with the atoms having more room to act, to vibrate, we get the finer, the more mathematically accurate influencing of cell vibration without the danger of overdoing; this we have known as dynamic action.

CHAPTER XIII.

RULES GOVERNING DRUG ACTION, WITH ILLUSTRATIONS—THE PRINCIPLE OF VIBRATION APPLIED TO DRUG ACTION—PERIODIC TABLE NO. II—INSTABILITY OF ELEMENTS IN GROUPS VI, VII, AND VIII—LESSONS TAUGHT BY PHOSPHORUS AND THE ELEMENTS THAT COMBINE WITH IT—DRUG COMPLEMENTS, OR THE LAW OF SUCCESSION—CARBON AND ITS LESSONS — CARBO-HYDRATES AND THEIR ANTITHESIS—CELL FOOD AND CELL STIMULANTS—HOW THE PENDULUM ILLUSTRATES THE ACTION OF THE CELL FOODS—IODINE AS AN EXAMPLE OF CELL STIMULANTS—DIFFERENTIATION BETWEEN CALC. CARB. AND CALC. PHOS.—THE ACIDS, HOW AND WHY THEY DIFFER IN THEIR ACTION—THE HARMONIZATION OF DRUG ACTION — WHAT ATROPINE TEACHES — THE DRUG PICTURE—THE PROPER SEQUENCE OF REMEDIES—GENERAL ACTION OF CELL FOODS—CHLORIDE OF SODIUM.

There are several essential facts to bear in mind in studying drug action, as follows:

That each and every element has its own peculiar vibration, and that this vibration causes a wave in the ether by which it can always be identified by spectral analysis;

That atomic vibration is the law of drug action, both in the organic and inorganic field;

That the violent motion or vibration of the electrons in the atom creates magnetism, and that the magnetic field is individualized for each and every element;

That when two or more elements are combined, their combined atomic vibration becomes harmonious and produces a magnetic field peculiar to that combination; and this is so for every combination, both organic and inorganic;

That atomic cell vibration generates a magnetic field individualized for each group of cells forming organs and tissues;

That this magnetism is the law of selection and attraction by which elements are attracted and assimilated by the cell;

That only as the vibration of the elements is in accord with the cell vibration can they approach sufficiently near to the cell or *group* of cells to influence them.

Periodic Table No. 2 will be found of great service in the explanation of drug action. The elements entering into normal cell life will be designated as cell food, and are printed in capitals so that they may be readily recognized; and those elements having no part in normal cell life will be known as cell stimulants, and are printed in small type. All other elements are omitted from this table so as to avoid confusion.

The two rules to be remembered as applying to this table are, that the elements in each Group increase in atomic vibration from Series to Series, in direct ratio as the number of electrons in their atoms increases, and that the elements in each Series increase their vibration as the column is ascended from Group to Group. This is due to two causes, namely: First, they increase in direct ratio as the electrons in their atoms increase in number; and secondly, and much more markedly, atomic vibration increases as the balance between the negative electrons and the positive electrification is broken up. In the ascent from Group to Group, the relative predominance of the negative electrons over the positive

electrification increases; and this is because of the well-known riotous activity of the negative element.

That it is possible to have a loss of equilibrium between the positive electrification and the negative electrons of an atom, is proven by the observations of the Curies, when they determined that Radium emanations (negative electrons) were thrown off until such time as the decrease in the number of the negative electrons present in the Radium atom was sufficient to restore the balance, and the positive electrification predominated, thus ending its radio-activity.

That this same condition of disturbance of balance is present in other elements I am sure is borne out by their well-known therapeutic properties. Indeed, this is the only explanation available for these properties, and it is neither unreasonable nor illogical to so presume.

In studying the therapeutic activities of the different elements from this standpoint, this fact will be firmly established.

To illustrate this fully, we find that Copper, at the foot of the column in Series 5, Group 1, has a larger number of elec-

trons in its atoms by 6,237 than have the atoms of Iron, situated at the top of the column in Series 4, Group 8; but as indicated by its position at the top of the column, as is Radium, it has (according to the law just enunciated) in general terms the same unbalance, but is not radioactive, at least to the same degree, because its electrons are not so overcrowded as are the electrons in the Radium atom (which overcrowding accounts, in part, for their flying off from the atom), and is, in proportion to the number of electrons its atoms contain, just as active. Consequently, because of this great relative predominance of the negative electrons over the positive electrification, its atomic vibration is greatly in excess of that of Copper. This would make it the more active of the two; and in a therapeutic sense we know this to be so, it being a well-established fact that the Iron preparations are among the most active and far-reaching therapeutic agents known.

Now we have the reason. It is not only a cell food, but is the cell food above all others having the highest atomic vibration, both because of its having the largest num-

ber of electrons in its atoms, and because of its relatively greatest negative unbalance over its positive electrification, which gives it its position at the top of the column in Group 8. No other cell food is found in this Group, unless our contention be sustained that Oxygen and Sulphur have been misplaced; and as their therapeutic activity goes to sustain the correctness of our claim that they should be advanced to this Group, we are sure it will be ultimately conceded. In a therapeutic sense this advancement would seem to be necessary.

The instability, the almost complete unbalance, and the great activity of the elements in the neighborhood of the top of the columns can find no better illustration than in the combination of Iron and Iodine, which is one of the most unstable of compounds, and yet one of the most active in influencing cell metabolism.

The so-called dual action of drugs is only a seeming double action. The term is a misnomer, as the atomic theory proves.

The atomic vibration of an element is of necessity always the same. It never changes, it always creates in the ether a

wave of the same definite length, and by this it is identified. Its vibration never varies, while the atomic vibration of the cells of the body is constantly changing, within certain limitations. An element, say Phosphorus, in being administered to an individual does not always find the same key of cell vibration, and consequently does not always influence the cells in the same way. Consequently, also, it cannot always produce the same symptoms. In proving Phosphorus, at one time the individual may have a cell vibration above the atomic vibration of Phosphorus and the action of the Phos. vibrations is to lower to its own key the cell vibrations of the individual, thus producing a certain line of symptoms. Then again, the next person proving this element may have a cell vibration keyed below that of the Phos. atoms and this time its influence is to raise the cell vibration of the prover up to its own key, and in this way the symptoms produced are directly opposite to the ones previously produced, and seemingly contradictory. This same statement also illustrates why an element in the next Series and same Group, for instance

Sodium Phos. and Potassium Phos., closely related in all their properties, have an affinity for different cell groups and produce an entirely different class of symptoms; they may be often complementary one to the other, meeting and blending, but ever distinct. It is because they have their own definite vibration and individualized magnetism, and are attracted by and influence different keys of cell vibration, their own vibrations being tuned to different, but probably neighboring keys.

This applies with equal force to combined elements, organic or inorganic, for elements combined vibrate in one harmonious key and have their individualized magnetic field. It also shows why, if cell vibration has departed far from the normal, more than one element is needed to fully restore it. A given element or combination of elements can only lift or carry cell vibration up or down to its own key, never beyond it. It is possible, if the cell vibration is not too far from the normal, for the cell vibration to keep climbing until the normal is reached, because of the influence of the vibrating element administered; but if cell vibration be

very far from the normal a succession of elements with their vibrations following consecutively up or down the scale, as the case may require, are needed to carry the cell vibration back to the normal.

Carbon fully illustrates these laws. Here we have a natural element third in the scale of atomic vibration, because it is third in the number of electrons its atoms contain, and it being in Group 4 the relative unbalance between the negative and positive electrons is but little disturbed, it not being sufficient to stimulate its vibrations up to that point on the scale occupied by the atomic vibration of Magnesium in Group 2.

We all know of the action of the Carbons, laid down by Hahnemann; it reaches down into the depths. Nash says its usefulness in cases of weakness is not surpassed by any other remedy, when the vital forces are nearly exhausted and the surfaces are cold and the patient lies motionless as if dead, with breath cold, pulse intermittent and thready, with cold sweat, stagnation of blood in the capillaries, echymosis with oozing of blood. He says Carbon reaches down even to death's threshold and lifts one

back toward life. And why is this so? Because the atomic vibration of Carbon is way below normal cell vibration, and in fact, it is almost at the stopping of cell vibration, and because of this very low vibration it is in attunement with the almost quitting cell vibration; it flies to the almost dead cell because of a similar magnetic field, and adds to it a slight stimulation, but all it could live under, and enough to quicken cell vibration and start it on an upward trend, so that the food element next in line of vibration can pick it up and carry it on a little further towards the normal.

If Carbon be administered to a patient with low vital force, in large doses of too low a potency, its action will be to still further lower cell vibration and to produce the picture just described, and it may even carry cell vibration down still further towards, or even to the point of quitting, thus causing the death of the cell and consequently the individual. Thus we get the dual picture of the action of Carbo. Veg. If administered at the right time, in a sufficiently low potency, to a patient in the proper stage of physical debility, it will depress, it will

slow down cell vibration until we have the very picture that we know so well to mean Carbo. Veg. It will produce the very symptoms in a patient that we have so long recognized as those indicating that Carbo. Veg. should be administered, and when so administered, to meet these symptoms, in the proper potency and dose, it slowly but surely picks up cell vibration and raises it towards an estimated normal. I say towards, because of necessity it can raise cell vibration only so far, that being up to its atomic vibration—but never beyond it. Then it must be met, must be followed by its complement, with a slightly higher atomic vibration, which in its turn picks up and carries cell vibration on up towards the normal to its position on the vibratory scale, and so on until the normal of cell vibration is reached and health is restored.

We have just noted how Carbon influences cell vibration. Hydrogen acts in the same way, only in a greater degree, it having the lowest atomic vibration of any of the elements, consequently when these two elements are combined we would naturally expect the combination to much more

profoundly influence cell vibration in this same direction than would Carbon alone. In the action of the Carbo-Hydrates on the human body we find this to be so.

The thing that prevents them from causing instant death is that they are always combined to a greater or less extent with elements having a much higher atomic vibration than themselves. To the extent that these elêments of higher atomic vibration enter into the combinations, are they made less dangerous to cell life.

The most dangerous drug known is Hydrocyanic Acid; this is composed of equal parts of the three cell foods having the lowest atomic vibration. It probably has the lowest atomic vibration of any combination of the elements that could take place; it certainly is the lowest of any we now know. Those combinations containing Oxygen or Chlorine, because of the great relative unbalance between positive and negative electrons in these two elements and because of the great relative predominance of the stimulating negative electrons, are less dangerous to cell life because they cannot depress or lower cell vibration to so

great an extent as do the Carbo-Hydrates that are only combined with Nitrogen.

The larger the percentage (up to a certain point) of these elements of higher vibration entering into a compound, the safer it is, because they overcome to a greater or less degree the depressing effects of the Carbo-Hydrates. This of course applies, but in much less degree, to Nitrogen.

When theory and practical experience perfectly agree it is the best proof of the correctness of the theory.

Please notice with what perfect harmony the following well-known drugs prove the correctness of our position. Their well-known properties as depressants, sedatives, relaxants and paralyzers is so well established and so universally recognized that it is beyond dispute, and now the *why* for these well-known properties is herein set forth:

Carbon—C. Hydrogen—H. Nitrogen—N. Oxygen—O. Chlorine—Cl.

	Carbo-Hydrates.
Acid Hydrocyanic, H, C, N	100%
Apomorphine, C17, H17, NO2	83
Morphine, C17, H19, NO3	78
Acetanilide, C8, H9, NO	79
Antipyrine, C11, H12, N2, O	76½
Phenacitin, C10, H13, NO2	74
Cocaine, C17, H19, NO4	74
Alcohol, C2, H5, OH	65
Amyl Nitrite, C5, H11, NO2	60½

In mathematics the correctness of a problem is always capable of being proven. This also applies to the working of a natural law; if a given statement is part of a natural law, if it is a scientific fact, it is capable of demonstration.

If this law of vibration explains perfectly how the above Carbo-Hydrates influence the organized cell, then it must of necessity just as perfectly explain how drugs having an opposite influence do their work. Nitro-Glycerine is universally recognized as per se *the* stimulant of the heart and circulation.

Note its composition: It contains but 23 per cent of the Carbo-Hydrates and 77 per cent of Nitrogen and Oxygen, the Oxygen

largely predominating. Thus we readily see why it is *the* stimulant above all others.

Carbo-Hydrates.
Nitro-Glycerine, C3, H5, (NO3)3... 23%

It also explains why we class Chloral Hydrate as a stimulant soporific, it containing but 16 per cent of the Carbo-Hydrates, Chlorine and Oxygen making up the balance.

Carbo-Hydrates.
Chloral-Hydrate, C2, H, Cl.3, O plus
H2, O..... 16%

Thus we see how known, well established drug action proves our claims.

If our position is correct, the slightest change in the vibration of an element, singly or combined, means a complete change in its influencing of cell life. The well-known action of Morphine and Apomorphine proves this to be correct.

Morphine. Water. Apomorphine.
C17, H19, NO3 — H2, O=C17, H17, NO2

The above formula shows of what they are composed. Take one molecule of water from Morphine and the result is Apomorphine. Water is 11 per cent Hydrogen

and 89 per cent Oxygen. It will be readily seen that it is the Oxygen that counts in this equation; that by depriving Morphine of one atom of the riotous Oxygen atom it ceases to be a paralyzer of sensory and motor nerves, and becomes Apomorphine and all that it stands for, par excellence the sedative, relaxant and emetic of the materia medica.

In what way, except by the laws of the electron and vibration could this problem be solved? What a striking change in the drug picture from such an infinitesimal change in chemical composition, and atomic vibration, one atom of Oxygen, with its individualized vibration and magnetic field, does it all.

There are two general classes of elements, those that have an atomic vibration in or above the upper half of the scale occupied by atomic cell vibration. This class will be presently illustrated. They contain the cell stimulants. The other class illustrated by Carbon, occupies that part of the vibratory scale below the middle of that occupied by atomic cell vibration, and while *acting* from a different view-point, are gov-

erned by and fully demonstrate the same general laws.

The above shows the action of cell foods. A cell food cannot have the wide range of action that a cell stimulant may possess. The influence that a cell food exerts over atomic cell vibration is best illustrated by the well-known action of the pendulum. Atomic vibration in a given case can only act on one side of the median line, and that is the side towards normal cell vibration. Taking the median line as representing the point on the scale of atomic cell vibration encountered by the remedy administered, the atomic vibration of the element carries the atomic cell vibration along the entire sweep of its pendulum in the direction of and towards normal cell vibration. In different individuals and at different times, this may be in either direction from the centre. Carbon and Phosphorus illustrate this point fully.

A cell stimulant can reach down (if it be not too far) to the key of atomic cell vibration present in the individual, pick it up and carry it on up towards its own key of vibration, and in doing so may produce a

series of symptoms that seemingly almost complete a circle, as is illustrated by the figure of the wave and with Iodine as an example. A cell stimulant can act only in one direction, to lift up, to carry it, relatively speaking, away from normal cell vibration up to higher keys.

The further explanation of these points as relating to cell stimulants is this: Take the wave as an illustration and the cell stimulant, Iodine, for an example, as it is typical and the element most active in this direction. A dose of Iodine is administered, it reaches the cell when its vibration is at the base or part way up to the crest of the vibratory wave, it stimulates cell vibration (if the dose be sufficiently large) up to and over the crest, and drops it down on the other side. In going up to the crest a certain lot of symptoms are developed, and as the cell vibration goes over the crest of the wave and drops down into the depths on its far side, a certain other lot of symptoms are produced, and these are diametrically opposite to the first. Climbing the wave to its top the symptoms indicate stimulation more or less marked, increased activities are

noted on all lines influenced by the drug. As the top of the wave is reached these symptoms are very pronounced, but suddenly it is observed that the capillaries influenced are becoming anaemic from too great tension; as the crest of this vibratory wave is passed and the plunge is made into the depths, the picture changes with kaleidoscopic swiftness, the contracted tense capillaries suddenly relax, engorgement more or less pronounced follows, relaxation and prostration is the result, with loss of functional activity.

And thus we can go through the whole table. It explains why Calc. Carb. reaches down to lower diseased conditions than does Calc. Phos., because its combination with Carbon gives it a slower atomic vibration than does the combination with Phosphorus; it explains why the acids in which Nitrogen and Oxygen greatly predominate have greater stimulating, and therefore greater lifting, properties than do the alkalies, because in these acids the negative electrons greatly predominate, we having shown in Chapter IX that the negative electrons are the greatest stimulant in

nature. It also shows in the acids containing Hydrogen, how this stimulus is held down by a smaller number of electrons and slower vibration. It explains how this latter class of acids reach down into the depths toward the bottomless pit of Carbon but not into it.

Again we have an illustration of the dual action of drugs, two sets of symptoms being produced diametrically opposite to each other. Physiological and Toxic drug action? Certainly; the latter is simply a continuation of the former carried over the crest of the wave. Similia Similibus? Yes, yes; they both act because of the vibrations of the atoms the different elements contain, and they, through their atomic vibration influence cell vibration. Dynamic drug action? Certainly; what better name to call the influence an element exerts over cell life that can only be possible because of their atomic vibration, the Dynamas of a drug being its special vibration and individualized magnetic field. Like indicates like. That is, an element or combination of elements always cures the set of symptoms it produced after passing the crest of

the vibratory wave on the plunge into the depths. It commences its curative action in the neighborhood of the key of cell vibration corresponding to the lowest point of vibration touched by the last symptoms produced by its toxic effects. Sulphur, in Chapter IX, is a most perfect illustration of this point. Like indicates like, but cures in directly the opposite ratio of vibration; a toxic dose over-stimulates cell vibration, causing exhaustion and collapse more or less marked. It cures by meeting and relieving this same exhausted condition when present in disease; it overcomes this too slow cell vibration by picking it up and carrying it on up towards the normal, the size of the dose determining which of these two actions is obtained.

Atropine will cause relaxation of tissues if given in extremely large doses. But how does it do it? By first contracting the capillaries until they and their nerve centres are literally deprived of blood. This anaemia through starvation causes paralysis of nerve centres and utter exhaustion of the capillary muscles; and of necessity they relax because there is nothing else for them

to do. This is another illustration of the above action. The first set of symptoms indicate the normal activities of the drug in a safe dose, and the second its toxic effects. In fact, it is simply traveling around a circle, drug action commencing where it leaves off, and leaving off where it commenced. All elements do not have this full scope of action, but act within these same general lines within their sphere of vibration.

Long experience has taught us that when a drug picture is thus produced it is a reliable index to the use of the element producing it, and when seen in an individual it indicates that this element above all others should be administered, and when so administered in the proper dose it produces the desired results.

The well-established symptoms brought out by drug-proving accurately indicates the remedies in their proper sequence. Until we have the ato-vibrometer to accurately and mathematically show the influence on cell vibration of the vibrating elements administered, this will have to suffice, for it is *the best* we can do. With this instrument

of precision an accomplished fact, the exact influence of an element, singly or combined, can be definitely ascertained, and the exact dose necessary in a given case to influence cell vibration will then be established beyond all cavil. Medicines must usually be given in succession to fully restore cell vibration; this necessitates more or less of a break in ascending or descending the vibrating scale. Right here is one advantage that the current given off by the Static Electrical Machine possesses. It is safer and is under perfect control; it raises or lowers cell vibration to the estimated normal without a break or hitch of any kind, and is absolutely under the perfect control of the administrator.

A glance at the table will show how Phosphorus modifies the action of Iron, making it more stable and reliable, and how it reaches down and lifts up steady-going, reliable and inactive Magnesia, Calcium, Sodium and Potassium, increasing their activity by increasing their atomic vibration, and giving them a wider range of usefulness, because it is only in such combination that they appear in cell life. It explains why it is that Magnesium has a different

line of symptoms than has Calc. Phos., and why Calc. Phos. has a much wider field of application than have the other three, and why it has a larger symptom list and wider application. These differences are wholly caused by their individualized vibration and well-defined magnetic field inherent in each element, which gives them their definite sphere of influence over cell vibration, with an affinity for cell groups of a similar magnetic field to themselves, it being different for each one. Thus they are enabled to supply cell deficiencies. Calc. Phos. has the highest vibration of the four, because it has the largest number of electrons in its atoms.

Sodium combined with Chlorine is a very important cell salt, because of its affinity for water, which is about 89% Oxygen and slightly over 11% Hydrogen, which holds down the atomic vibration of the compound and makes for its stability. These two combinations must have an atomic vibration within close range of each other from their relative position in the table, and this would account for their intimate association in all cell life.

CHAPTER XIV.

KALI. BI. CHROM.—BROMINE—ARSENICUM—IODINE—THE MERCURIALS—GOLD.

The next in order is the sub-division designated as cell stimulants. Kali. Bi-Chrom. as an active stimulant to mucous cells, has long held an important place in the Materia Medica; and bearing in mind the rules laid down at the beginning of the previous chapter, the why is apparent. The position of Chronium in the table indicates its great activity, and how it lifts up Potassium and makes of the combination one of the most active stimulants and irritants to the mucous membrane.

Bromine, in Group 7, bears out all that could be expected of it because of its position, which indicates the why of its great activities, and why it is so dangerous if given in too large doses or if continued for too long a time; and why it is safer and better tolerated when combined with Sodium than when combined with Potassium.

This brings us to Arsenicum, stable, reliable, active in increasing metabolism; it holds a middle place in this table. It is

above in its vibration those elements entering into cell formation, consequently it is safer and better used in the minute dose, because if used in too large doses it would over-excite cell vibration, thus defeating the object desired, and might destroy life.

Arsenicum combined with Copper increases the activity of the latter because it raises atomic vibration and adds much greater negative stimulation. The resultant combination is an extremely active poison, much more so than is Crude Copper. It actively increases cell vibration to the danger point if not used with extreme caution and in the attenuated dose, affecting principally, if not wholly, the mucous membranes, which probably have a higher cell vibration than any other group of cells.

Next in order is Iodine, the red-headed element, with all the characteristics of the red-headed temperament. It is found in Group 7, Series 7. It probably has the highest atomic vibration of any element used in medicine, and as a cell stimulant it easily holds first place. With the facts herein set forth this is easy of comprehension. *With* the very large number of electrons in

its atoms is coupled the great predominance of negative electrons over its positive electrification, it being almost without positive control. This fully accounts for its great activities. It is the most active of the cell stimulants in exciting cell metabolism. It is most active and safest when combined with Potassium or Lime, because they modify its stimulating qualities, holding it down and making it more stable, steady and reliable, and less liable to do harm by overstimulating the cell. They tone down its vibrations to more nearly that of atomic cell vibration, and because they are component parts of the normal cell, combined with them it can get in closer touch with cell vibration than would otherwise be possible. Thus is indicated the reason for its greater influence over cell life in this combination than when combined with Mercury, and why it is less dangerous.

The combination with Mercury is more nearly soluble and of a lower atomic vibration than has Mercury, which brings it more nearly in harmony with cell vibration.

Mercury combined with Chlorine, in Group 7, or Oxygen in Group 6, has all the

active properties ascribed to the negative electrons, modified, of course, by the Mercury. These combinations have a much lower atomic vibration than has Mercury, which is much closer to cell vibration and consequently more readily influences it. This is due to an equal extent to the domination of the negative elements, which overbalance to a great extent the positive electrification of Mercury; this makes the combination less stable and more active in a therapeutic sense than is Mercury. Mercury uncombined has an atomic vibration so far removed from atomic cell vibration that it is impossible for it to have any material influence over the cell. The atomic vibration of these combinations is still so high as to make it necessary to potentize them to bring them within the safety point, and, indeed, we know that when potentized the best results are obtained, and that when used in the large dose just the condition is produced that in the proper dose they relieve.

Gold the active, commercially, in the arts, sciences, and in medicine. Is this an accident, or is it of necessity so because of its

extremely high atomic vibration and great stability, it excelling in these two properties, it being in Group 1. It has too high an atomic vibration to get in accord with cell vibration when uncombined, but combined with Soda and Chlorine, all is changed; it gives stability and deep action to the combination, while Soda and Chlorine bring the atomic vibration down to the neighborhood of atomic cell vibration, thus giving it a chance to exert its deep-acting properties in influencing cell metabolism. Combined in this way it is one of the most reliable of elements, deep and profound in its action, as its position in Group 1 would indicate of necessity it must be.

The cell stimulants, and more especially those above series 6, must be used in the higher potencies to be safe; too low a potency being more dangerous than is the crude substance, because the too low potency may be sufficiently subdivided to get in touch with the cell and overpower its vibrations by over-stimulation because of mass influence. They may destroy cell vibration by over-stimulation exactly as do the X-rays and Radium emanations, causing exhaustion, collapse and death of the cell.

The same rules, lines of reasoning and illustrations used in explaining the action of the natural elements, apply with equal force to organic substances, both animal and vegetable, used in treating disease, for, *per force, they are formed of these same natural elements, there being nothing else out of which to form them.*

It will be readily recognized that the rules laid down for drug action are universal in their application. As before suggested, with every discovery of a law of nature has come the recognition that it tallies with and fully explains knowledge obtained through practical experience. The electronic theory and the law of atomic cell vibration is no exception to this rule, for by it all known therapeutic rules are scientifically explained and harmonized, and the healing of the sick is made an exact science.

CHAPTER XV.

EULOGY—SUMMARY.

It is but just in closing to pay tribute to those great minds that have done so much for humanity, in paving the way to the exact science herein indicated. They were close students, acute observers, logicians of no mean order, possessing ability excelled by none, of this or any other age, and only because science was not yet ready to point the way was their task left unfinished.

Ringer, one of the first, and the peer of them all; Burt, Hughes, Roberts, Barthelow, all giants and contemporaneous in developing physiological drug action; Blake, known but by few (and they the most fortunate), excelled by none, had the added ability to take the therapeutic links formed by these others and forge them into a perfectly logical chain with never a flaw. He it is to whom we owe most that we know of drug action. Last, but not least of these therapeutic giants, is Hahnemann, the immortal, preceding these others by over half a century; he, nearly a hundred years before science could give him a clue

as to the why, recognized and formulated with exactness the laws of drug action as we know them today. All these years they have stood the test. Not until now, in these pages, has the scientific explanation been given. Just now science is only ready to reveal the why. The law of atomic cell vibration does this logically and with mathematical exactness, and tells why of necessity they must be true.

Was Hahnemann inspired? Yes! Yes! Yes! Directly from the Infinite! In him the all-pervading intelligence found a mind so great, so broad, so deep, so logical, and of such close, acute perception that it was enabled to grasp the thought waves direct from the Infinite, and to formulate them.

A greater mind than his was never bestowed on man, and it is with reverence and the greatest humility that I dedicate the thought waves herein found to the proving of his greatness.

The last link needed in this chain to make the healing of the sick an exact science is the instruments of precision herein enumerated. With an ato-vibrometer that will with mathematical exactness record atomic cell

vibration, and a volt meter to indicate human voltage, the last vestige of uncertainty will disappear.

With an ato-vibrometer, tables of normal cell vibration will be attainable, and any deviation therefrom will be readily recognized. With this instrument the influence over cell vibration of any of the elements can be accurately noted, the key for their administration established, and the dose needed in a given case can be definitely fixed. With this, the influence exerted over atomic cell vibration by the vibrating Static Electrical current, administered on a graduated scale, will be definitely established, and the truth of our claim herein set forth proven.

Then our claim that through this medium atomic cell vibration is absolutely under our control will not admit of a doubt. When all this is an accomplished fact, the practice of the healing art will be on the basis of an exact science, which means there will be no room or excuse for sects in medicine.

Finally, my purpose in putting forth these thought vibrations is to have them create

waves in the ether that will ripple to the ends of the earth, that they may set men thinking in terms of atomic cell vibration and help develop the principles herein outlined to their perfect fruition.

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This volume is written for those who are Seekers of the Truth, be they Physician, Scientist or Students of Nature—both animate and inanimate. It announces nature's primal law, shows how it dominates all matter, how it fully explains organic life and all its functions with the laws governing the same.

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